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**UNIVERSITY OF SOUTHAMPTON**  
FACULTY OF LAW, ARTS & SOCIAL SCIENCES  
School of Law

**Fair Use and File Sharing in Research and Education**

by

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Thesis for the degree of Doctor of Philosophy

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ABSTRACT

FACULTY OF LAW, ARTS AND SOCIAL SCIENCES

SCHOOL OF LAW

Doctor of Philosophy

FAIR USE AND FILE SHARING IN RESEARCH AND EDUCATION

by Yueyue Wang

This work was inspired by the well-ventilated current problems around the use of digital file sharing technologies and their promotion of infringement of copyright leading to the alleged destruction of entertainment industries. Different legal systems have applied different analyses to such problems, and there is no clear and coherent answer to the question of whether file sharing, especially in the form of peer-to-peer (P2P), is legal. The particular focus of this thesis flows from the realisation that litigation around file sharing has uniformly explored it from the perspective of users downloading entertainment materials such as music and videos. Comparatively little attention has been paid to whether research and educational users have, or should have, rights to use the same digital file sharing technologies to access copyright materials important to their work. If digital file sharing is declared illegal by the courts at the behest of the entertainment industries, then what will happen to research and educational users of these networks?

To explore this key problem, this thesis focuses on how fair use doctrine, the most important exception and limitation to copyright, has transferred from the traditional copyright environment into the context of digital file sharing. By undertaking a study of relevant legislation and cases, such as the well known *Napster*, *Grokster* and *MP3.com*, the “who” issue, namely, *who* is the party entitled to benefit from a fair use defence will be highlighted.

Having established that fair use as a defence operates ineffectively in the digital file sharing environment, the thesis then looks at existing alternative or “fared” use models, and particularly the disadvantages of “fared” use system in serving research and educational file sharing. Finally the thesis turns to what is termed the “voluntary model”: a model in which copyright owners make their works available to academic users for free, via an institutional repository, the authors gaining non-pecuniary benefits while the commercial publisher being cut out as a “middleman”. Although future work to develop the details of this approach would be required, the thesis asserts this is a promising way towards ensuring access to copyright works in research and education thus benefiting society, whilst at the same time establishing fair compensation to authors for their efforts.

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## Part I. Background Issues

### Chapter 1. Background to the Problem of File Sharing in Research and Education

Sharing matters in society because it encourages socially beneficial, culturally significant exchange of resources<sup>1</sup>. Defined as the action of dividing and apportioning in shares between two or more recipients<sup>2</sup>, sharing occurs in almost all aspects of human social life — in a narrow sense, it refers to joint or alternating use of a physically finite good, such as splitting a cookie between two persons; in a broader sense, it may also include exchanging something which can be regarded as an impersonal and non-rivalrous good, such as swapping information on a website with millions of people. It is generally recognised that changed technological circumstances have further expanded the concept of sharing.<sup>3</sup> For example, the emergence of Internet technology led to the phrase “file sharing” in the digital context, which is altering the way people share knowledge. As Professor Paliwala states, the networked information sharing culture promotes knowledge users to become active partners in file sharing.<sup>4</sup>

Since Napster<sup>5</sup> elevated “file sharing” to a buzz word in news reports, newspapers, and magazines in 1999, file sharing technology, especially in the form of peer-to-peer (P2P) file

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<sup>1</sup> Sharing is a common usage in both anthropology and economics literatures. Sociologists argue that sharing is the very core of social lives, such as in the information, culture, education, computation, and communication sectors. See, e.g., Dan M. Kahan, “The Logic of Reciprocity: Trust, Collective Action and Law”, *Law, Economics and Public Policy*, No. 281(2002). See also, Yochai Benkler, “Sharing Nicely: On Shareable Goods and the Emergence of Sharing as a Modality of Economic Production”, *Yale Law Journal*, Vol. 114 (2005) at 274-275. See also, Gunilla Wilden-Wulff, *Challenge of Knowledge Sharing in Practice: A Social Approach*, Oxford: Chandos Publishing Ltd. (2007).

<sup>2</sup> “Sharing” is the present participle of share. “Share” refers to giving a part or portion of a larger amount which is divided among, or contributed by a number of people. *Concise Oxford English Dictionary*, New York: Oxford University Press Inc., 11<sup>th</sup> ed. (2006) at 1323.

<sup>3</sup> Technology may not determine the level of sharing, but it does provide a platform for sharing social resources in new ways, such as that digital technology makes it possible to share impersonal information through websites. See Yochai Benkler, *supra* note 1, at 278.

<sup>4</sup> Abdul Paliwala, “Free Culture, Global Commons and Social Justice in Information Technology Diffusion”, *Journal of Information Law and Technology*, Vol. 1 (2006) at 23.

<sup>5</sup> See *A&M Records, Inc. v. Napster, Inc.*, No. 00-16401, U.S. D.C. No. CV-99-05183-MPH. [Hereinafter, *Napster*, in brief].

sharing, has been met with hostility and panic<sup>6</sup>. Most previous research and litigation on file sharing technology has been concerned with commercial content in use on file sharing networks.<sup>7</sup> The disputes over encouraging academic content file sharing systems<sup>8</sup> deserve special attention, given that a number of systems applying file sharing in research and education have been designed, such as eduCommons<sup>9</sup>, [SETI@home](http://setiathome.ssl.berkeley.edu/)<sup>10</sup>, and Edutella<sup>11</sup>. These allow users to share text, audio, and video files stored on computers to support learning and research. Perhaps it is time to seek equilibrium in accommodating restrictive copyright protection and efficient use of resources via file sharing technology in the domains of research and education.

Chapter 1 focuses on the background of the problems explored by this thesis. Section 1 begins with an introduction to the definition of file sharing on the Internet. By tracing the major developments in file sharing technology, the social and legal implications of this technology are identified and discussed. Section 2 highlights the potential of applying file sharing technology

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<sup>6</sup> P2P technology has mainly been criticised for decreasing sales of CDs, copyright infringement and network security problems. See, e.g., Rafael Rob and Joel Waldfogel, “Piracy on the High C’S: Music Downloading, Sales Displacement, and Social Welfare in a Sample of College Students”, *Journal of Law and Economics*, Vol. XLIX (2006) at 29-62. See also, Rafael Rob and Joel Waldfogel, “Piracy on the Silver Screen”, *NBER Working Paper*, No.12010 (2006) (Concluding that illegal downloads through P2P have had a negative impact on content providers’ revenues, especially as regards the music industry). See also, RIAA, *Recording Industry Association of America: 2002 Yearend Statistics*, “In 2002, the RIAA reported that CD sales had fallen by 8.9 percent, from 882 million to 803 million units; revenues fell 6.7 percent”. Available at [http://www.riaa.com/news/marketingdata/pdf/year\\_end\\_2002.pdf](http://www.riaa.com/news/marketingdata/pdf/year_end_2002.pdf) However, some others argued that file sharing does not reduce and might increase sales, See, e.g., Felix Oberholzer and Koleman Strumpf, “The Effect of File Sharing on Record Sales: An Empirical Analysis”, *Journal of Political Economy*, Vol. 115 (2007) at 1-42.

<sup>7</sup> See, e.g., most research and litigation criticise that the application of P2P technology has decreased sales of CDs, DVDs, and copyright infringement. See, e.g., Patricia Akester and Francisco Lima, “Copyright and P2P: Law, Economics and Patterns of Evolution”, *E.I.P.R.* Vol. 28 (11) (2006) at 576. See also, Stan J. Liebowitz, “File sharing: Creative Destruction or just Plain Destruction?” *Journal of Law and Economics*, Vol. 49(1) (2006) at 1-28. See, Lawrence Lessig, *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*, The Penguin Press (2004) at 68-73. See also, *MGM Inc v. Grokster Ltd* 259 F. Supp. 2d 1029 (C.D. Cal. April, 2003). *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster Ltd.*, 380 F.3d 1154, 1162-1166 (9<sup>th</sup> Cir. 2004). *MGM Inc. v. Grokster Ltd al Supreme Court (04-0480)*, 545 U.S., 125 s. Ct. 2764 (2005) [Hereinafter, *Grokster*, in brief].

<sup>8</sup> Some file sharing software and systems are regarded as illegal. See, e.g., *Napster*, supra note 5.

<sup>9</sup> “EduCommons” is an open system for creating, sharing, and reusing educational content and discourse to support learning. It is run by OSLO Group in the Department of Instructional Technology at Utah State University. Available at <http://educommons.sourceforge.net/>

<sup>10</sup> [SETI@home](http://setiathome.ssl.berkeley.edu/) is a network system using thousands of Internet-connected personal computers to help in the search for extraterrestrial intelligence. Available at <http://setiathome.ssl.berkeley.edu/>

<sup>11</sup> “Edutella” is developing a P2P network for the exchange of educational resources between German universities, Swedish universities, Stanford University, and others. Available at <http://edutella.jxta.org/>

in the context of research and education, which are considered as different judging from most current file sharing debates concerning copyright infringing applications. Section 3 explores the essential reasons why academic file sharing deserves particular copyright protection through a comparison with general file sharing. To that end, the problems related to applying “fair use” doctrine in academic file sharing are considered.

## 1.1 File Sharing: Someone Knows What I Want to Know

*Someone knows what I want to know. Someone has the information I want. If I can find her, I can learn it from her. She will share it with me.*<sup>12</sup>

— Jessica Litman

### 1.1.1 What is File Sharing?

Sharing files is not as simple as Litman describes. Indeed confusion exists about “sharing” files due to the fact that information can be shared with others by various means. She transfers the file on a diskette; or sends it to me by email. Also, I can receive the file from her via a P2P communication network such as MSN Messenger; or by P2P file sharing networks directly (e.g., I can obtain a song from her hard drive via KaZaA<sup>13</sup> network). Herein lies the problem: what kinds of information sharing should be used to define the term “file sharing”? The definition of the “file” shared is also open to interpretation. An OECD study described that file sharers are now commonly trading full movies and software programs, whereas pioneering P2P programs such as Napster only allowed for the trade of MP3 audio files<sup>14</sup>. The following narrative seeks to expound which issues have been raised to constitute file sharing, especially in the Internet era.

Advances in technology enable new concepts of the “file”. The definition of a “file” being shared has been extended in response to specific technological conditions, which have changed

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<sup>12</sup> Jessica Litman, “Sharing and Stealing” (2003) at 5, available at, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=472141](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=472141).

<sup>13</sup> See <http://www.kazaa.com/us/index.htm>

<sup>14</sup> See *OECD Information Technology Outlook 2004: Peer To Peer Networks In OECD Countries*, Paris, Organisation for Economic Co-Operation and Development (2004) at Chapter 5.

dramatically over the last two decades. Until the end of the 1960s, the dominant way of obtaining and exchanging information was through “tangible” technology, in which the information was stored and transferred in a non-digital form, i.e., “hard copy”, such as photocopying articles on paper, recording magnetic particles on a tape, and so on. The term file sharing at that time mainly referred to exchanging files<sup>15</sup> in the physical genres outlined above.

Digital technology, however, is changing the situation of formerly physical resource swapping genres. Internet technology poses two sets of developing conditions which mandate the conceptual evolution of file sharing. Instead of traditional tangible file sharing media such as paper, tape or diskette, transfer of information on the Internet is in the form of digitised flow. The data flow form of resource swapping, inherent within which is a more effective and efficient way of information exchange, raises difficulties in identifying the real purpose in use of the copyrighted work. Thus, there is a much greater degree of difficulty in detecting the purpose of downloading unspecified data which may or may not be a copyright work, and may or may not have educational or entertainment content, than verifying the aim of a student photocopying an academic article in a library for his assignment. Therefore, there is a loss of identifiable context.

Another significant change in the context of file sharing, inherent in Internet technology, lies in the dramatically enhanced speed of sharing information. The Ninth Circuit Court provided the information that in 1999 approximately 10,000 music files were “shared” per second using Napster, and that more than 100 users attempted to log onto the Napster server every second. Napster’s popularity amounted to a figure of 75 million users by the end of 2000.<sup>16</sup> This statement highlights the impossibility that traditional non-digital files could be shared amongst such a vast number of people in such a short time, given that digital files can be copied promptly unlimited times through the Internet. In these new circumstances, the term “file” in the context of “sharing” has been confirmed by further definition as a collection of digital data processed via

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<sup>15</sup> “File” here means “a folder or box for keeping loose papers or documents together and in order”. See *Concise Oxford English Dictionary*, supra note 2, at 530. (It is one of the traditional definitions of “file”, especially before the term “computer file” emerged.)

<sup>16</sup> See *Napster*, supra note 5, at 4108.

computer programs<sup>17</sup>, rather than as pertained beforehand just as tangible documents. Thus, digital files, including all kinds of digital information files, such as MP3 files, audio files, and video files, have been included within the term “file” in the context of digital sharing.

There are different schools of thought as to how the term “sharing” can best be explained. On the one hand some people advocate that sharing is always involved in matters that are related to allocating. Richard Parsons, the CEO of Time-Warner, argues, whatever use is involved in P2P networks, it equates to “online shoplifting” rather than “file sharing”<sup>18</sup>. Similarly, David Kendall says, “The word file sharing...[is] not really sharing at all, because if I share a piece of cake with you, we’re each doing with a little less---I have half a piece and you have half a piece. This doesn’t hold true for digital distribution since I don’t lose anything by ‘sharing’ with you.”<sup>19</sup> Nevertheless, digital file sharing is more like sharing ideas, rather than like sharing a cake. Being treated as tangible property, the slices of cake can be allocated to each person in order to be “shared”, while ideas are intellectual property which does not necessarily lose a part when being shared among people, as with digital distributing. The use of “blogs”<sup>20</sup> (or weblogs) is an illustrative example. When people post hyperlinked ongoing diaries into the blog, and readers of the blog write in to contribute their own comments, they are “sharing” information on the blog but nobody loses anything<sup>21</sup>. That is to say, splitting and apportioning are not necessary for digital file sharing. When a digital file is offered to Internet, non-rivalrous sharing happens among network users.

From a technical perspective, file sharing in a network takes two forms: uploading files and

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<sup>17</sup> “File” is a collection of data or programs stored under a single computing identifying name. See *Napster*, supra note 5, at 530.

<sup>18</sup> See Richard Parson, “Ensuring Content Protection in the Digital Age: Hearing before the Subcomm”, *Telecommunications of the House Commerce Comm.*, 107<sup>th</sup> Cong. 30 (2002). (According to him, “The popular term for trafficking in copyright works---“file sharing”---is a misnomer. It isn’t sharing. It is online shoplifting.”)

<sup>19</sup> David Kendall, *Copyright in Cyberspace*, Brigrance Lecture to Wabash College (2002) available at <http://www.copyrightassembly.org/briefing/DEKWabashSpeech4.htm>

<sup>20</sup> “Blog”, also known as weblog, means a personal website on which an individual records opinions, links to other sites, etc. on a regular basis. See *Concise Oxford English Dictionary*, supra note 2, at 1636.

<sup>21</sup> Andrew Ross Sorkin, “Building a Web Media Empire on a Daily Dose of Fresh Links”, *New York Times* (Nov. 17, 2003). Available at <http://www.nytimes.com/2003/11/17/technology/17blog.html>. See also Lawrence Lessig, “The New Road to the White House: How Grassroots Blogs are Transforming Presidential Politics”, *Wired*, 11.11 (2003) at 136.

downloading files<sup>22</sup>. There is no clear consensus as to which form should be adopted to define “sharing” digital files and this in turn has meant that there are many different expectations of what file sharing constitutes. Those who use a broad definition of file sharing claim that general participation in the network, either downloading or uploading, or both, can be regarded as sharing<sup>23</sup>. Others prefer to think that file sharing is merely the behaviour of posting one’s files to the network for other network members to download, i.e., uploading files. By distinguishing “file sharing” from “file swapping”<sup>24</sup>, Strahilevitz explains that file sharing is “making one’s files available for others to download,”<sup>25</sup> e.g., making the media files on one’s hard drive available to other members of the network, whereas Litman defined file sharing as “posting information on the net,”<sup>26</sup> such as the use of a weblog.

To avoid any confusion in the following narrative, it is necessary to define our terms. In order to clarify the definition of “file sharing” used in this thesis, I make a distinction between two separate uses of the word “file” which can mean both “the file being shared outside network”, such as paper documents and information stored on a tape, and “the file being shared inside network”, i.e., those digital files only being exchanged in a network, even if in a small local area network. Herein, the term “file” refers to digital files shared on a network. As to the phrase “sharing”, a general definition of file sharing will be adopted. Thus, whether one only posts the information on a website or just downloads files from a blog or social networking site such as MySpace, or whether the file is made available to thousands of people via a peer-to-peer (P2P) network<sup>27</sup> (e.g., sharing a popular song on KaZaA network) or shared between two friends

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<sup>22</sup> “Downloading” means copying data from one computer system to another or to a disc. “Uploading” refers to transfer data to a larger computer system, so that others can access it, i.e., “making available”. See *Concise Oxford English Dictionary*, supra note 2, at 431, 1589.

<sup>23</sup> See, e.g., Ralf Steinmetz and Klaus Wehrle, *Peer-to-Peer Systems and Applications (Lecture Notes in Computer Science)*, Springer Publisher, 1<sup>st</sup> ed. (2005).

<sup>24</sup> Lior Jacob Strahilevitz, “Charismatic Code, Social Norms, and the Emergence of Cooperation on the File-Swapping Networks”, *Virginia Law Review*, Vol. 89 (2003) at 14. (Strahilevitz uses “file swapping” referring to general participation in the network, including a downloader, an uploader, or both of them).

<sup>25</sup> Ibid.

<sup>26</sup> See Litman, supra note 12, at 23.

<sup>27</sup> “Peer-to-Peer” is defined as “a collaborative technology premised on individual users voluntarily making computer resources available, including resources such as files, computing services, and network bandwidth, through their internet connections”. A peer-to-peer (P2P) network refers to the computer network which uses diverse connectivity between participants in a network and the cumulative bandwidth of network participants rather than conventional centralised resources where a

through Instant Messaging (IM) services such as MSN Messenger; these will all be considered as “file sharing” in this thesis.

### ***1.1.2. Technologies of File Sharing***

From the earliest Internet— ARPANET<sup>28</sup>— to the latest pure peer-to-peer<sup>29</sup> system, the evolution of file sharing technology has paralleled the growth of Internet. It is also worthy to note that the burgeoning of file sharing networks has been challenging legal practice. The following traces the inception and further development of file sharing technology, and its impact on legal evolution, especially in the context of copyright law practice.

From the copyright perspective, a primary conflict between file sharing technology and copyright law lies in, on the one hand, file sharing networks providing incentives and platforms to the free flow of ideas, knowledge and information, whereas the fundamental purpose of copyright law is to prevent unauthorised free flow of authors’ creations. This collision has triggered judicial responses and legislative initiatives, leading to debates on legal problems derived from file sharing technology.

#### **1.1.2.1. The Early Internet as File Sharing Tool (1969-1995)**

ARPANET, the earliest Internet established, was not a client/server system but rather a P2P

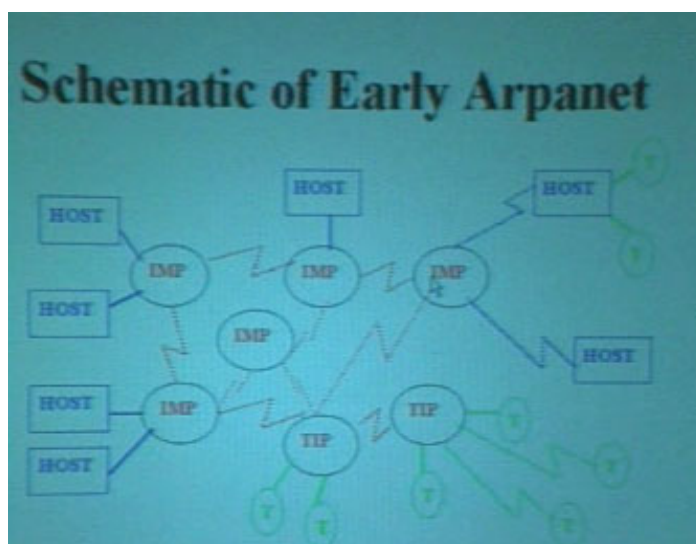
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relatively low number of servers provide the core value to a service or application. It is a sub-set of file sharing technology. See, Javed I.Khan and Adam Wierzbicki, “Foundation of Peer-to-Peer Computing”, *Elsevier Journal of Computer Communication*, Vol. 31 (2) (2008). See also, Kenneth A. Berman and Fred S. Annexstein, “An Educational Tool for the 21<sup>st</sup> Century: Peer-to-Peer Computing”, *NSF Grant and Ohio Board of Regents’ Research Investment* (2005) at 1.

<sup>28</sup> “ARPANET” is the earliest Internet model which was created by the United States Defense Advanced Research Project Agency (ARPA) in 1969. It is a P2P model rather than a client/server system. See Bolt Beranek and Newman Inc. Arlington VA, *A History of the ARPANET: The First Decade*, Pentagon Reports (1981).

<sup>29</sup> P2P network is divided into three types: pure P2P, hybrid P2P and mixed P2P. Pure P2P means a network where there is no central server or router, but peer act as clients and servers (e.g., Freenet, Ian Clarke, “Freenet: a Distributed Anonymous Information Storage and Retrieval System” (2006) available at, <http://www.ecse.rpi.edu/Homepages/shivkuma/teaching/sp2001/readings/freenet.pdf>). Hybrid P2P refers to a network which owns a central server while it does not substantially store files (e.g., *Napster*, supra note 5). Mixed P2P is a P2P system which has a central server but is anonymous (e.g., Gnutella network. See *Grokster*, supra note 7). See also, Charlotte Waelde and Lilian Edwards, “Online Intermediaries and Liability for Copyright Infringement”, *WIPO SEMINAR ON COPYRIGHT AND INTERNET INTERMEDIARIES* (2005) available at [http://www.wipo.int/meetings/2005/wipo\\_iis/en/presentations/doc/wipo\\_iis\\_05\\_ledwards\\_cwaelde.doc](http://www.wipo.int/meetings/2005/wipo_iis/en/presentations/doc/wipo_iis_05_ledwards_cwaelde.doc)

model.<sup>30</sup> Created by the United States Defense Advanced Research Project Agency (ARPA) in 1969, ARPANET served as a test bed for new networking technologies, linking many universities and research centers. The first two nodes that formed the ARPANET were UCLA and the Stanford Research Institute, followed shortly thereafter by the University of Utah. The backbone of the ARPANET consisted of packet-switching computers, which were called IMPs (Interface Message Processors). The IMPs were connected by, for the time, superfast 56 Kbit/s lines<sup>31</sup>. Conventional computers with appropriate communications software were then connected to these IMP nodes. As shown in Figure 1<sup>32</sup> below, the main purpose of ARPANET was to allow every node to share information through the network on an equal partner basis.



**Figure 1.** Prof. Peter Kirstein describes the revolutionary architecture of the Arpanet

In the following years, the Internet became more established and complicated. With the growth of ARPANET, Usenet system was established in 1979, allowing “two machines on the Usenet network to discover new newsgroups efficiently and exchange new messages in each group”<sup>33</sup>.

<sup>30</sup> See supra 28, 29.

<sup>31</sup> See Peter Kirstein, “Internet, Web, What’s Next Conference?”, European Organisation for Nuclear Research, Geneva, available at <http://www.funet.fi/index/FUNET/history/internet/en/arpamet.html>.

<sup>32</sup> Ibid.

<sup>33</sup> Andy Oram ed. *Peer-to-Peer: Harnessing the Power of Disruptive Technologies*, O’Reilly and



Granting that most of the network users were researchers and the users were not too many in number to be controlled, neither ARPENET nor Usenet called copyright into question. In short, the earliest file sharing model preferred a pure P2P process. However, this pure decentralised file sharing technology was not suitable for the radical explosion of the Internet in the subsequent year of 1994.

#### **1.1.2.2. Web-Based File Sharing: Client/Server Model of the Internet (1995-1999)**

The rapid growth of network technology led to a massive increase in access to the Internet throughout general society during 1994. Millions of ordinary citizens rather than just computer researchers began accessing Internet resources. Since then the Internet has transformed “from a quiet geek utopia into a bustling mass medium”<sup>34</sup>, a medium for people to send emails, browse web pages, and purchase goods. The change introduced by the Internet resulted in an alteration to network architecture, in which the client/server model replaced the equal node framework.

The client/server protocol is a straightforward model for information sharing. The ISP (Internet service provider) provides and controls the pattern of publishing or uploading information. Correspondingly, the client just simply connects to a central server, downloads data, and disconnects. As demonstrated in Figure 2,<sup>35</sup> in a client/server network, the client sends his request to the central server, then the server searches its index to find out whether there is an answer or not and feeds back to the client.

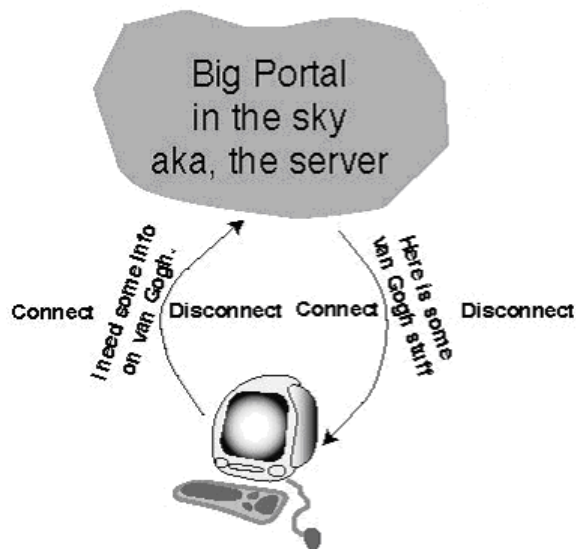
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Associates, Inc., U.S. (2001) at 3.

<sup>34</sup> Ibid, at 5.

<sup>35</sup> See Thom Gillespie, “P2P: Technically Speaking, It’ll Rock Your World”, *Café TECHNOS Maître d’Igital*. Available at <http://www.indiana.edu/~slizzard/p2p/index.html>

## The current client/server model



**Figure 2.** *The current Client/Server Model*

File sharing by the client/server model is not an equal system. In the process of client/server file sharing the ISPs are in charge of the information provided on the website and govern the transfer of information to the clients, while the clients just need to know how to ask a question and listen for a response.

On such a centralised file sharing model, it is relatively easy to detect information sources and to clarify liabilities involved in copyright issues. For instance, the *MP3.com Case*<sup>36</sup> involves decisions about copyright liability of online service providers. As we can see from detailed analysis in Chapter 3<sup>37</sup>, in the *MP3.com Case* it was decided that *MP3.com*, an online music subscription provider, was liable for copyright infringement on the ground that it made copies of copyright protected works for its own commercial purpose with knowledge of the direct infringement.

### 1.1.2.3. Peer-to-Peer Applications in File Sharing

Compared to the web-based file sharing model, P2P technology gave rise to a revolution in the

<sup>36</sup> See *UMG Recordings, Inc. v. MP3.com, Inc.* 92 F. Supp. 2d 349 (S.D.N.Y. 2000). [Hereinafter, *MP3.com*, in brief].

<sup>37</sup> See Chapter 3, at 118.

ways people exchange information. Although the earliest application of P2P technology---Instant Messaging was launched in 1988<sup>38</sup>, the greater impacts of P2P technology were not widely realised until 2000 when Napster became a popular website across the whole world. As discussed below, the specific characteristics of P2P technology has created serious legal problems and raised questions relative to copyright practice.

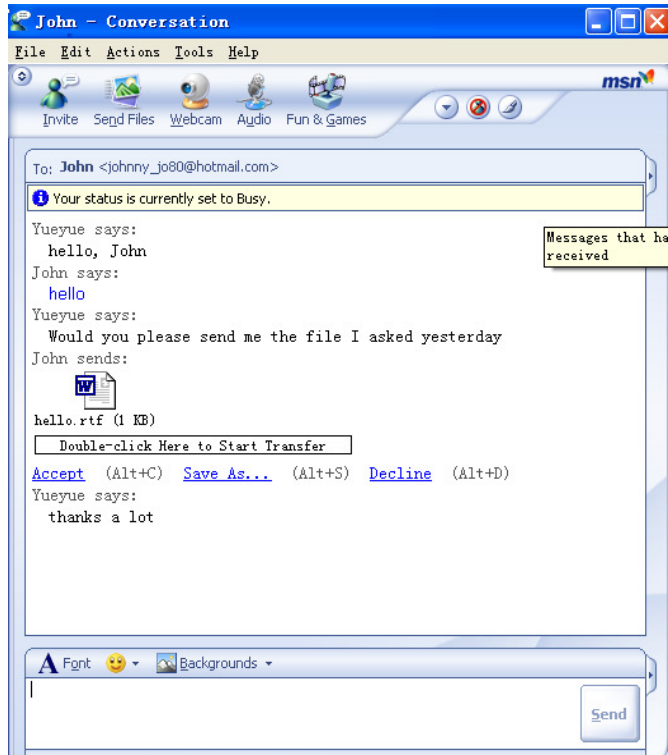
#### *1.1.2.3.1. P2P Communications:Pre-Napster*

The graph shown in Figure 3 will be very familiar to Microsoft Windows users, demonstrating the conversation window of MSN Messenger, one of the most famous instant-messaging communications in the world. Since the first modern Internet-based instant messaging system---ICQ (“I seek you”) ---emerged in 1996, there have been more than 200 million users spread among a half-dozen major IM services such as ICQ, Yahoo! Messenger, Windows Messenger.<sup>39</sup> In spite of the fact that most users have no idea that the Instant Messaging (IM) services are based on P2P technology, Instant Messaging has become the most popular browser-based messaging program in modern technology.

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<sup>38</sup> Howard Rheingold, “The Virtual Community”, *Homesteading On the Electronic Frontier* (1988). Jakko Oikarinen wrote the original IRC program, a multi-user, synchronous communications tool designed to work over Internet. At first, it was tested on a local community of twenty users and then installed throughout the Finnish national network and ultimately the Scandinavian portion of Internet. IRC--the software needed to access the medium, as well as word of its attractions--propagated throughout the wider Internet by the end of 1988. By the early 1990s, there were hundreds of channels and thousands of people chatting across the Net, twenty-four hours a day. Available at <http://www.rheingold.com/vc/book/6.html>.

<sup>39</sup> Michael Miller, *Discovering P2P*, Sybex Inc., U.S. (2001) at 24.

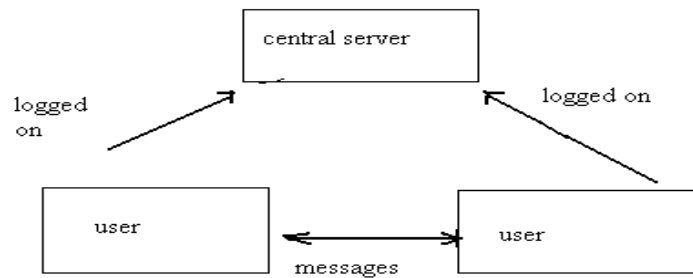


**Figure 3.** *MSN Messenger Conversation Window*

The basic function of IM, as shown in Figure 3 above, is one-to-one conversation by creating multiple-user real-time chats. IM users typically exchange text messages in the conversation, which appear in the other user's IM client software virtually instantaneously. Some IM servers also allow users to communicate via voice or full-motion video such as the MSN's Webcam and Audio services. Moreover, users are permitted to send digital files back and forth, which include not only text files (.txt files) but also music and movie files (e.g., .mp3, .avi, .wma, .rm files, etc.). In the above instance, if Yueyue clicked the "accept" button in the above example, the file named hello.rtf would be transferred from John's computer to Yueyue's. Additionally, if she clicked the button "save as", it would be stored in her computer hard drive via the route assigned.

Compared to client/server Internet services, IM networks have two distinguishable technical characteristics: the lack of a central server and the use of a friends list. On the one hand, unlike traditional Internet services, IM services do not rely on chat servers to host chat rooms or channels where users could exchange messages in real time. Instead, the messages flow from

one user to another directly without a central server being involved. Rather than storing or interfering with the individual messages, central servers are only to log users onto an IM network. In other words, IM central servers are just “to keep track of who is online and what their unique IP addresses are”, so that IM network remains essentially P2P in nature<sup>40</sup>. Figure 4 below shows how the ICQ IM system works.



**Figure 4.** *How ICQ Works*

On the other hand, the use of a friend list guarantees that information can only be shared with usually personally known contacts. When MSN Messenger is launched, you will see the client window shown in Figure 5. It is easy to recognise the identities of the friend buddies in the contact list by their email addresses; contacts can also be cut off or deleted freely. To add a user to the contact list, start by clicking the “Add a contact” button. If the user specified has a Microsoft Passport, the contact will be added to the contact list after he fills in the information required in the dialog box. Otherwise, he will be notified to wait for the user’s feedback. Generally, the prerequisite to adding or being added to a user’s contact list is acquiring his or her email address. This requirement limits the information transferring by IM services to “between friends”.

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<sup>40</sup> See Miller, *supra* note 39, at 214.



**Figure 5.** MSN Friends Contact List

#### 1.1.2.3.2. P2P File Sharing: From Napster to Grokster:

##### *The Napster Story*

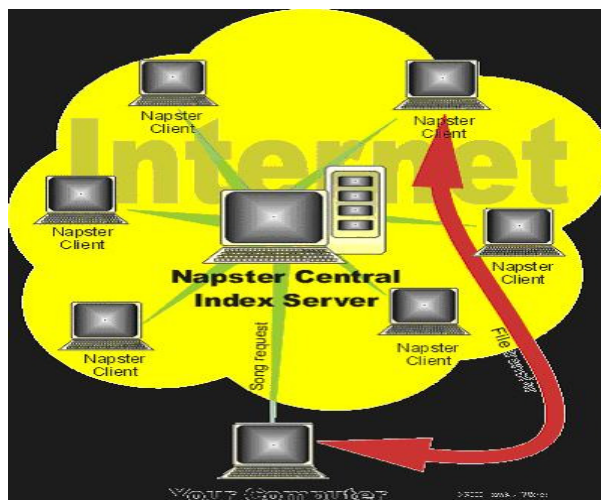
Even though its life may have been short, Napster was the most popular word of the Internet in the year 2000<sup>41</sup>. The original purpose of Shawn Fanning in creating the Napster software in 1999 was just to provide music fans a place to search for, share and exchange music files with others. However, Napster turned out to be remarkably popular very quickly. According to the figures provided by the Ninth Circuit Court, in 1999 around 10,000 music files were “shared” per second via Napster network and more than 100 users attempted to log onto the Napster server every second. By the end of 2000 Napster’s popularity involved 75 million users.<sup>42</sup> A little more than half of these were in the United States, while there were significant user populations in the United Kingdom, Canada, Australia, Germany and some other European

<sup>41</sup>See Clay Shirky, *Listening to Napster*, in *Peer-to-Peer: Harnessing The Benefits of A Disruptive Technology*, Andy Oram ed. (2001) at 21, 26. (Napster “has contributed to illegal copying on a scale that is without precedent”). See also, Karl Taro Greenfeld, “Meet the Napster”, *Times* (2000) at 60 (in this article, it was suggested that [Napster] had already ranks among the greatest Internet applications ever, [and]...Napster site was the fastest growing in history.)

<sup>42</sup> See *Napster*, supra note 5, at 4108.

countries.<sup>43</sup>

Compared to web-based file sharing models, exchanging files on Napster was very straightforward. Napster facilitated several supporting services, such as the MusicShare software, Napster's network servers and server-side software. A centralised index of files available for sharing was hosted on Napster's central servers.<sup>44</sup> The user request for a particular file was routed through the music index. Crucially, music files listed on the index were hosted on end users' computers, not on Napster's central servers. When the music file requested was found in the index, the file was transferred from the host computer to the computer of the Napster user seeking the file directly. Figure 6<sup>45</sup> below shows how Napster worked. Instead of being posted, hosted, or served by Napster servers, all MP3 files on the Napster network were stored on member PCs. This is clearly an application of P2P file sharing technology.



**Figure 6.** *The Graph of How Napster Works*

<sup>43</sup> “Jupiter Media Metrx Reports Multi-Country Napster Usage Statistics for February 2001”, *LEXIS PR Newswire* (April 5, 2001).

<sup>44</sup> Damien Riehl, “Peer-to-Peer Distribution Systems: Will Napster, Gnutella, and Freenet Create a Copyright Nirvana or Gehenna?” *William Mitchell Law Review*, Vol. 27 (2001) at 1761, 1766.

<sup>45</sup> See P2P Networks (TCD 4BA2 Project 2002/2003). Available at <http://ntrg.cs.tcd.ie/undergrad/4ba2.02-03/Intro.html> ,

In the area of intellectual property law, Napster's decentralised file-host design creates a situation in which previously accepted notions such as ISPs' liability have been challenged. As discussed in Chapter 3<sup>46</sup>, Napster's special technical design gave rise to its fatal legal error. In 2000, Napster was sued in the first P2P case that was eventually heard by the U.S. court, brought by owners of copyright musical works. In brief, the Court chose to protect the copyright owner, i.e., the record company's interests, at the expense of the innovative technology pioneered by Napster. It concluded that Napster was liable for contributory and vicarious copyright infringement for its end-users' direct copyright infringement activities,<sup>47</sup> on the grounds that Napster was "engaging in, or facilitating others in copying, downloading, uploading, transmitting, or distributing plaintiffs' copyrighted musical compositions and sound recordings, protected by either federal or state law, without express permission of the right owner."<sup>48</sup>

#### *Grokster*

In 2003, the *Grokster* case<sup>49</sup> caused a second wave of discussion about the use of P2P technology in file sharing. Gnutella<sup>50</sup>, the file sharing program used in Grokster, was released over the Internet one year after Napster's creation.<sup>51</sup> Allowing users to share files in any format, Gnutella's network is more versatile than Napster's.<sup>52</sup> Designed to "create self-perpetuating networks that grow independent of any single company's involvement"<sup>53</sup>, Gnutella is a typical P2P network using "supernode"<sup>54</sup> architecture. Compared to Napster, Grokster's Gnutella network does not rely on any central server to store files or the file catalog. Instead, all the computers connected to the network function as mini-servers, i.e., "nodes", by which a number

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<sup>46</sup> See Chapter 3, at 109-111.

<sup>47</sup> See *Napster*, supra note 5, at 4230-4233.

<sup>48</sup> See *Napster*, supra note 5, at 4223.

<sup>49</sup> See *Grokster*, supra note 7.

<sup>50</sup> See <http://www.gnutella.com/>.

<sup>51</sup> Gnen Kan, "Gnutella and GoneSilent.com: on Lessons from Gnutella for Peer-to Peer Technologies", supra note 33, at 94- 95. See also Riehl, supra note 44, at 1774.

<sup>52</sup> See *Grokster*, supra note 7, at 94 - 122.

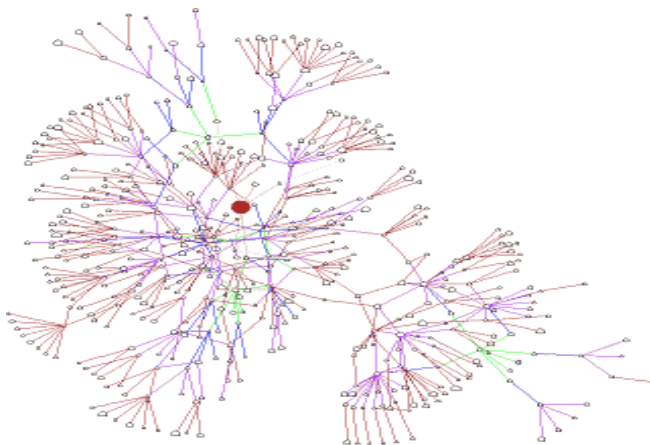
<sup>53</sup> See Miller, supra note 39, at 133.

<sup>54</sup> "Node" is defined as "a connection endpoint in a network, often a computer or the network client-server application, depending on one's perspective---physical or virtual". See Bo Leuf, *Peer to Peer, Collaboration and Sharing Over the Internet*, Boston: Pearson Education, Inc. (2002). In comparison, "Supernode" is defined as "a peer computer that has above-average bandwidth and processing capacity", and "any peer on the network can become a supernode if it meets the appropriate processing power, bandwidth, and latency requirements". See *Oram*, supra note 33, at 157.



of selected computers on the network form an indexing server, i.e., “supernodes”.

The way a Grokster’s user searches for files is different to that of Napster’s, given that there is no centralised file index in the Grokster network. After downloading and logging into the Grokster’s network, the user’s computer will be linked to a large number of easily accessible local supernodes and on to individual users. When the user sends his request for files using a search phrase such as an artist’s name, album title, song name, etc., the query will be transferred to the other computers to which it is connected. Then these computers will in turn send the request to others to which they are linked, and so on.<sup>55</sup> Once the desired file is found on someone’s computer, a peer-to-peer connection will be established between the requester’s and the host’s computers on the network and the files are then transferred directly between the two user’s computers. The following illustration<sup>56</sup> (Figure 7) is a snapshot of a Grokster peer network, in which every tiny circle signifies a node or an end-user computer in the network, and the black spot is a supernode. In other words, Grokster is a truly decentralised P2P protocol which neither hosts files nor compiles a central index of files.



**Figure 7.** How Grokster Works

<sup>55</sup> See Lawrence Lessig, “Expert Report of Professor Lawrence Lessig Pursuant to Federal Rule of Civil Procedure Vol. 26 (a) (2) (B)”, available at: <http://www.law.stanford.edu/publications/details/957/>.

<sup>56</sup> See *An Atlas of Cyberspace*, available at [http://www.cybergeography.org/atlas/more\\_topology.html](http://www.cybergeography.org/atlas/more_topology.html).

This decentralised structure made Grokster less likely to be liable for a legal challenge than Napster was<sup>57</sup>. The Ninth Circuit Court of Appeals held that Grokster was not liable for contributory or vicarious copyright infringement as the system itself might be used for both substantial infringing and non-infringing copying activities. In other words, Grokster network did not constitute an infringement because “Plaintiffs’ notices of infringing conducts [were] irrelevant, since they arrive[d] when Defendants d[id] nothing to facilitate, and [could] not do anything to stop, the alleged infringement of specific copyrighted content”.<sup>58</sup> However, the Supreme Court went on to import the “inducement” theory, claiming that it was an indirect copyright infringement when Grokster intended to distribute a device which was intended to induce copyright infringement.<sup>59</sup>

#### *1.1.2.3.3. Freenet, Tor and BitTorrent: Post-Napster P2P File Sharing*

##### *Freenet*

Freenet, a third generation P2P network emerged in 1999 at the University of Edinburgh in Scotland. This was designed to enable a “distributed decentralised information storage and retrieval system”<sup>60</sup>. Freenet’s network was planned to contain a self-organising and self-governing infrastructure.<sup>61</sup> One of the characteristics which make Freenet distinct is its open, completely decentralised system design. At its core, Freenet is designed to be untraceable and uncontrollable. Similar to the Gnutella protocol, the entire Freenet network is housed across the peers. However, Freenet adopts a very different file distribution design from previously distributed protocol such as Gnutella. Under Gnutella network, the two nodes are immediately connected with each other once the requested file is found and the transfer is then direct, point-

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<sup>57</sup> See Maureen Daly, “Life after Grokster: Analysis of US and European Approaches to File sharing”, *E.I.P.R.*, Vol. 29(8) (2007) at 319-324. See also, Patricia Akester, “Copyright and the P2P Challenge”, *E.I.P.R.*, Vol. 27(3) (2005) at 106-112. See, Robert E. Litan, “Law and Policy in the Age of the Internet”, *Duke L.J.* Vol. 1045 (50) (2001) at 1068-1069.

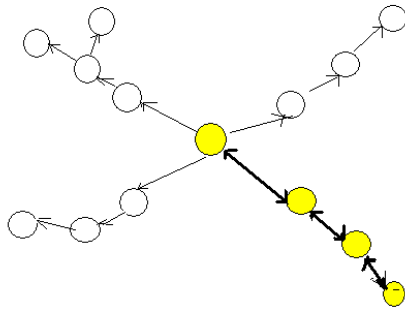
<sup>58</sup> See *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster Ltd al*, 380 F.3d 1154, 1162-1166 (9<sup>th</sup> Cir. 2004) at 36(a).

<sup>59</sup> See *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster Ltd al*, Supreme Court (04-0480) 545 U.S., 125 s. Ct. 2764 (2005) at 486.

<sup>60</sup> See Michael, *supra* note 39, at 99.

<sup>61</sup> See Ian J. Taylor and Andrew Harrison, *From P2P to Web Services and Grids: peers in a Client/Server World*, Springer Publisher (2004) at 36. See, Gale Reference Team, *Ascom certifies FreeNET voice-over-Wi-Fi solution with Trapeze Networks (BUSINESS): An article from: Wi-Fi Wireless LAN*, Thomson Gale Publisher (2007). See also, Michael, *supra* note 39, at 24.

to-point. In contrast, under the Freenet network, a request for a file is propagated through neighbouring nodes, and once the file is located it is returned along the same path. As shown in Figure 8 below, when a request is fulfilled, the file is passed along from peer to peer until it arrives at the requester's computer, rather than being transferred from the host computer to the requester's directly.



**Figure 8.** *The process of a request transfer on the Freenet network*

On the other hand, file transfer through Freenet work is anonymous. The files are propagated from Freesite (i.e., Freenet node) to Freesite without the knowledge of either end user<sup>62</sup>. A file might reside on one computer today and a different computer tomorrow. Therefore, there is no way that anyone (even the owner of a host computer) can recognise where a request came from, beyond the most immediate node, so that it is almost impossible to determine which end user issues any particular request. In other words, no computer in a Freenet network will know where a file is physically hosted at any given point in time. Thus, Freenet claims that the file sharing can not be tapped, traced, or monitored. The inability to physically locate any given file makes Freenet a censorship-proof file sharing network.<sup>63</sup>

Another unique character of the Freenet lies in the fact that the network cannot be shut down

<sup>62</sup> The reason that nobody can track the file shared on the Freenet network lies in two technical design features of Freenet. Firstly, files shared on the Freenet are downloaded and uploaded in small chunks from multiple sources, rather than as a whole. Secondly, the use of encryption technology ensures anonymity in communications between nodes so that even a host sharing a file cannot identify what file is uploading or storing. See, e.g., Roemer R, "The Digital Evolution: Freenet and the Future of Copyright on the Internet", *UCLA Journal of Law and Technology*, Vol. 5 (2002). See also, Nathaniel S. Good, *Usability and privacy: a study of KaZaA P2P file sharing*, New York: ACM Publisher (2003).

<sup>63</sup> See Michael, *supra* note 39, at 184-185.

technically. Once a file has been posted onto a Freesite, it can neither be forcibly removed nor edited by anyone, even the person who uploads the file. The file will not disappear until it falls into disuse<sup>64</sup>. (That is, if nobody requests the file for a given period, the file will eventually be discarded from the network automatically). In other words, the Freenet network cannot be shut down by any individual, company or government organisation.

With respect to technical advantages, Freenet benefits much more from its decentralised and anonymous design than Napster or Grokster. The users of Freenet are able to swap digital files without exposing either a vulnerable central database of nodes or data. The encryption technology adopted ensures anonymity in Freenet user communication. In addition, the inbuilt redundancy feature of the technical design, which has the effect that files shared on Freenet are downloaded and uploaded not as a whole, but in small chunks from multiple sources, prevents Freenet system from being shut down. However, Freenet also has its possible disadvantages. From a technical point of view, the greatest weakness of Freenet is the “updating-disabled” problem. That is to say, the file on Freenet cannot be changed or revised once it is put on the network. Moreover, the “free” Freenet comes at the cost of speed. The decentralised design requires more bandwidth to run the file sharing system, which posits obstacles for the speed of, browsing websites. A Freenet user narrated his experience browsing Freenet-based websites, “they are slow, slow, slow: I am on broadband and I felt like I was back in 9600 days”<sup>65</sup>. To deploy design trade-offs between anonymity and usability, more-satisfactory P2P file sharing schemes like Tor and BitTorrent have been created, providing users with more safety, privacy, and anonymity online.

### *Tor*

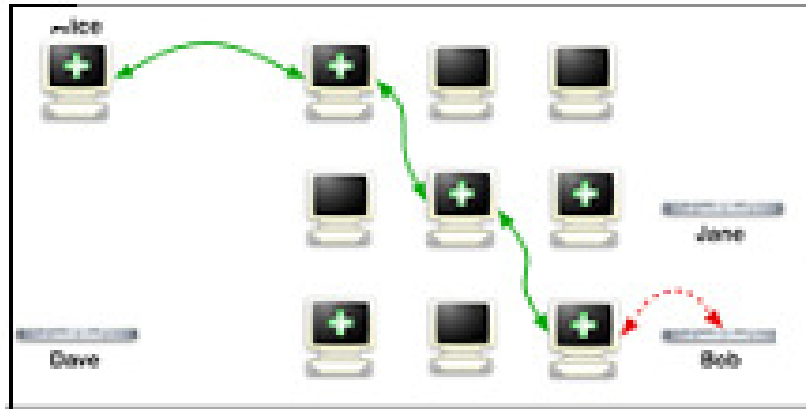
Supported by the Electronic Frontier Foundation (EFF), Tor is a toolset improving anonymity in web browsing and publishing, instant messaging, IRC, and more. As described in the report of EFF, the idea behind Tor is similar to “using a twisty, hard-to-follow route in order to throw off

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<sup>64</sup> See, Michael, *supra* note 39, at 185. See also, “Policy Debate: Should Napster and similar MP3 distribution mechanisms be banned?” *South Western Economics Resource Center* (2003) Available at, [http://www.swcollege.com/bef/policy\\_debates/napster.html](http://www.swcollege.com/bef/policy_debates/napster.html).

<sup>65</sup> *Ibid.*

somebody who is tailing you—and then periodically erasing your footprints”<sup>66</sup>. Figure 9<sup>67</sup> demonstrates that files on the Tor network are routed in a random pathway through several servers, rather than taking a direct transfer, such that no middleman can inspect where the files originate nor where they are going.



**Figure 9.** Tor Network System

### *BitTorrent*

In 2001 BitTorrent,<sup>68</sup> as a new P2P file sharing communication protocol was designed and released. Under BitTorrent, each user (i.e., the peer) is able to prepare, request and transfer any file over the network. A file distributed through BitTorrent is treated as a number of identically-sized pieces. On requesting a particular file, the BitTorrent user will receive a list of peers currently transferring pieces of the file. Such a group of peers connected to each other to share the pieces of a file is named a Swarm. Instead of downloading files directly or indirectly from the original file distributor, BitTorrent peers trade pieces of the file with one another within a swarm. This specific technical design makes it hard to trace the route through which a file is

<sup>66</sup> See, *Tor: Overview* (June 2005), available at <http://tor.eff.org/overview.html>.

<sup>67</sup> Ibid.

<sup>68</sup> See BitTorrent Website, <http://www.bittorrent.com/>. Bram Cohen, “Incentives Build robustness in BitTorrent” (May 22, 2003), available at, <http://www.BitTorrent.org/BitTorrentecon.pdf>. (Accessed February 23, 2008). See also, Carment Carmack, “How Stuff Works: How BitTorrent Works”, <http://www.computer.howstuffworks.com/BitTorrent.htm>. (Accessed February 23, 2008).

shared. Thus, it is even more difficult to define copyright liability on such networks.

The enhanced usability of anonymous file-sharing through post-Napster P2P networks tends to attract more users, which also aroused panic in the entertainment industry. Since 2004, the Motion Picture Association of America (MPAA) and International Federation of the Phonographic Industry (IFPI) have brought a large number of search engines and news groups affiliated with BitTorrent networks, such as *EliteTorrents*, *SuprNova.org*, *eDonkey*, *LokiTorrent* and *TorrentSpy*, to court.<sup>69</sup> The primary legal question is whether BitTorrent itself should be liable for the direct infringements committed by its end-users. The Courts were all in favour of copyright holders, so that sites like *EliteTorrents* have been shut down for being cataloguing tools for users to search and download copyrighted digital content.

Since the *Napster and Grokster case*, courts around the world have had to address the questions of whether, and to what degree, file sharing technology intermediaries may be liable for copyright infringing activities generated by their services. In a Korean case in 2005, the Court granted Soribada, the operator of a P2P service, be held liable for copyright infringement because it had aided their users' direct infringing activity.<sup>70</sup> In September 2005, the Federal Court of Australia concluded that the defendants, who supplied the Kazaa software to authorise public copying of protected content without copyright owners' agreement, were liable for copyright breach.<sup>71</sup> Further, the Taipei District Court held that the local P2P subscription service, Kuro, be convicted for criminal copyright infringement in September 2005.<sup>72</sup> With the

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<sup>69</sup> See, e.g., *Columbia Pictures, et. Al. v. Justin Bunnell, et.al.*, 245 F.R.D. 443 (C.D.Cal. 2007). See also, Drew Cullen, "SuprNova.org ends, not with a bang but a whimper" (2004) available at, [http://www.theregister.co.uk/2004/12/19/suprnova\\_stops\\_torrents/](http://www.theregister.co.uk/2004/12/19/suprnova_stops_torrents/). Jan Libbenga, "Dutch Raid eDonkey sites, seize servers" (2004) available at, [http://www.theregister.co.uk/2004/12/15/dutch\\_raid\\_against\\_edonkey\\_sites/](http://www.theregister.co.uk/2004/12/15/dutch_raid_against_edonkey_sites/). See, "Federal Law Enforcement Announces Crackdown on P2P Piracy Network", *News Release*, U.S. Immigration and Customs Enforcements (May 25, 2005) available at, <http://www.boingboing.net/images/EliteTorrents.pdf>. See, John Borland, "Feds Shut Down Bit-Torrent Hub", *CNET NEWS.COM* (May 25, 2005) available at, [http://news.com.com/Feds+shut+down+BitTorrent+hub/2100-1028\\_3-5720541](http://news.com.com/Feds+shut+down+BitTorrent+hub/2100-1028_3-5720541).

<sup>70</sup> See *Korean Association of Phonogram Producers v. Soribada Inc.*, Seoul District Court (August 29, 2005) Docket No. 2004 Ka Hap 3491.

<sup>71</sup> See also, *Universal Music Australia Pty Ltd. V. Sharman License Holdings Ltd.* [2005] Federal Court of Australia, F.C.A. 1242.

<sup>72</sup> See *Taipei District Court Procuratorate v. Chen Kuo-hua & Chen Kuo-hsiung*, Taipei District

development of technology, this ongoing file sharing trend keeps, and will keep on, challenging the relationship between technology and law.

### 1.1.3. Pros and Cons of File Sharing

It is generally recognised that the invention of digital file sharing technology has presented society with opportunities for inexpensive information exchange, enhanced environment for “free speech” and more efficient way for knowledge dissemination.

*First*, application of file sharing technology helps to reduce the cost of file sharing. In the entertainment industry, the application of file sharing technology allows that the entertainment system “will [be] delivered more efficiently.”<sup>73</sup> Through investigating the revenues of music CDs’ in the U.S. market, Fisher analyses cogently the current allocation of revenues of the entertainment industry in the US, and concluded that almost half of file sharing costs may be avoided with the application of digital file sharing networks.<sup>74</sup>

These potential savings can also be expected in research and educational file sharing. For instance, the development of technology has eliminated conventional publishing entry barrier, and provided content creators and owners, i.e., authors, educators and professionals with the opportunity to present their works directly to the public. LULU.COM<sup>75</sup> is such a self-publishing<sup>76</sup> platform. It is “not a publisher, but a digital marketplace”.<sup>77</sup> By using LULU’s

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Court (September 21, 2005) 2003 Su-Tzu No. 2146.

<sup>73</sup> William W. Fisher, *Promises to Keep: Technology, Law, and the Future of Entertainment*, Stanford University Press (2004) at 18.

<sup>74</sup> See Fisher, *supra* note 73, at 18-20. (As Fisher states in this book; in the US around 39% of the music CD’s cost is collected by the retailers, 14% by publishing company as salaries, 8% is spent on marketing, 8% is paid to disc manufacture, 5% is used to cover “Artist and Repertoire” expenses, 12% is for recording music while only 4% is disbursed to rightsholders of the musical compositions. In practice, the average price of a music CD in US is \$18. -but if the CD disc only costs \$1.44 or so, and the music recording is about \$2.16, then the payment for the artists is no more than \$0.72. That is to say, all the work it takes to create the songs, make the CD, and burn the album only costs \$4.28, while more than \$13 is appropriated by traditional retailers, publishers, and so on.)

<sup>75</sup> See LULU.COM website, available at, <http://www.lulu.com/uk/about/index.php>

<sup>76</sup> “Self-publishing” refers to the way to publish books and other materials by the authors of the works directly, without the intervention of established, third-party publishers. The main feature of self-publishing is the absence of traditional publishers. Instead, the content creator and/or owner are completely in charge of editing, printing, marketing and distributing the material to consumers. See,

tools to format and upload their works, content creators and owners are able to print out and distribute their books, videos, CDs, DVDs, and reports to as many people around the world as they like. According to LULU's survey, 80% of all creator revenue can be collected by self-publishers, and millions of pounds has already been settled.<sup>78</sup> On the other hand, decreased publishing costs may also reduce market prices of the content, which in turn may allow a reduction in the content prices paid by research and educational users. For example, the market price of the book "*The Computer in Court*" is £8.78, while the downloading price on LULU.COM is only £5.50.

It is interesting to mention that the emergence of this author self-controlled file sharing is challenging the status of traditional publishers, especially in the context of research and educational file sharing.<sup>79</sup> Contemporary open license movements, such as Open Access to Knowledge (A2K)<sup>80</sup> and Creative Commons (CC)<sup>81</sup>, have been encouraging academic authors to give away their copyright content without the intervention of publishers.<sup>82</sup> Certain state or public regulations have also been adopted to reduce the impact of traditional commercial publishers on content distribution.<sup>83</sup> Thus, the question here lies in whether conventional publishers will still be necessary in digital academic file sharing; if not, how can an effective

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Federick S. Lane, *The Decency Wars: The Campaign to Cleanse American Culture*, Amherst, New York: Prometheus Books (2006) at 99.

<sup>77</sup> See LULU.COM, supra note 75.

<sup>78</sup> See LULU.COM, supra note 75.

<sup>79</sup> See, e.g., Ronan Deazley, "Publishers be Damned! Some Thoughts on the Science and Technology Committee's Report on Scientific Publication", *E.I.P.R.*, Vol. 25(3) (2005) at 97-105. See also, House of Commons Science and Technology Committee, *Scientific Publications: Free for all?* 10<sup>th</sup> Report of Session 2003-2004, London: The Stationery Office Ltd. (2004).

<sup>80</sup> "Open Access to Knowledge" (A2K) movement is a loose collective of society groups, governments and individuals converging on the idea that human knowledge and cultural heritage belong to the scientific community, claiming to minimise limitations presented by traditional licensing in the context of the digital file sharing world.

<sup>81</sup> "Creative Commons" (CC) is a project aiming to enable copyright owners to grant some of their rights to the public, while retaining others through open content licensing protocols, and thereby promote information reutilisation and dissemination for the purposes of creativity and innovation. See, "OAK Law Report Number 1: Creating a legal framework for copyright management of open access within the Australian academic and research sector", *Report for the Department of Education Science and Training (DEST)*, Australia (August 2006) at 110.

<sup>82</sup> See Chapter 5, at 179-186.

<sup>83</sup> See, e.g., public levy scheme, also known as "levies", "tariffs" and "taxes" collected on file sharing goods and services, has been used in at least 42 countries to facilitate the evolution of new media technology.



academic self-publishing system be built up? Chapter 4 and 5 will discuss such problems in details.

*Second*, file sharing technology is also observed as a way to supply users with a wider range of information choices, greater digital resource accessibility, and increased interoperability. File sharing networks provide users with more access to and choice of information than any traditional industry could do<sup>84</sup>. You may not be aware of it, but a large number of people are actively seeding, searching, sharing and downloading digital files which include all kinds of content (e.g., .txt, .jpg, .wma, etc.) from digital file sharing networks. From a monophonic copy of *Blonde On Blonde*<sup>85</sup> to “Original Not Re-released” underlined Frank Zappa albums, it is not exaggerating to say that you can find any entertainment files you would wish for on file sharing networks. It is estimated that the amount of data now swapped on P2P networks is about “equivalent to a full third of all present Internet traffic”<sup>86</sup>. Greater information accessibility may also benefit academic users of file sharing networks. As we can see from the example scenarios 2 and 3 discussed in Part 1.3.1,<sup>87</sup> the application of academic file sharing architectures may offer more “hidden” research and educational content to scholars, researchers and students, in order to further enhance academic information sharing and dissemination.

In contrast to traditional resource exchange methodology, file sharing technology provides users with more interoperability, best illustrated in the application of P2P networks. For instance, with a music file downloaded from Napster or a law book downloaded from LULU.COM, you may play/read it on your laptop, send it to your friends by email, or even upload it to some networks to share it with more people. However, certain specific technical tools such as DRM may limit the ways users share information. Apple’s iTunes FairPlay technology is an example. As discussed in detail in Chapter 4,<sup>88</sup> iTune central server controls what files users receive and

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<sup>84</sup> See, e.g., According to the Ninth Circuit Court report in 1999 approximately 10,000 music files were “shared” per second using Napster. See *Napster*, supra note 5, at 4108.

<sup>85</sup> “*Blonde On Blonde*”, the first epic rock record of Bob Dylan, was produced in 1966. The song was famous as a devilishly playful and unapologetic pro-drug anthem.

<sup>86</sup> Luigi Canali De Rossi, “Why P2P File Sharing Is Good: The P2P Manifesto” (2005) available at [http://www.masternewmedia.org/2005/01/17/why\\_p2p\\_file\\_sharing\\_is.htm](http://www.masternewmedia.org/2005/01/17/why_p2p_file_sharing_is.htm).

<sup>87</sup> See Part 1.3.1.2, at 46-50.

<sup>88</sup> See Chapter 4, at 166-171.

decides where those files are going to, so that the songs listed on the iTunes website can only be downloaded and played on iPod MP3 players.

*Third*, file sharing system may promote creation of more knowledge and artistic works. In the process of applying file sharing technology, the Recording Industry Association of America (RIAA) has been promoting a belief in the delinquency of file sharing in copyright infringement by advising that the application of file sharing decreases artists' motivation to creativity.<sup>89</sup> This statement indicates promoting artists' creativity deserves particular attention, as failure to protect artists' rights has a negative impact on cultural evolution. In fact, there is evidence to undermine this assertion of the RIAA. A variety of reports evinces that file sharing technology increases, rather than decreases, creation of knowledge and artistic works<sup>90</sup>. In the context of digital file sharing, there are clear advantages for some artists, especially those who are not very famous. Instead of criticising the new technology for copyright infringement, these artists advise that the file sharing network is a good way for them to distribute their works and to publicise themselves as well. For example, Franz Ferdinand star Alex Kapranos claimed, rather than hindered their progress, file sharing was adopted to "help [them] as a band in getting established"<sup>91</sup>.

The development of Open Access movement demonstrates that file sharing is also welcome in the academic arena, as it offers obscure authors more chances of disseminating their ideas in an efficient and convenient way.<sup>92</sup> Compared to traditional academic publishing which typically takes several months or even longer for a submitted paper to appear in print,<sup>93</sup> file sharing networks make it easy and efficient for academic authors to share their ideas.

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<sup>89</sup> See e.g., *Napster*, supra note 5; *Grokster*, supra note 7.

<sup>90</sup> See e.g., from an investigation in his store named Twist and Shout in Denver, Paul Epstein reached the conclusion that P2P file sharing "really turns a lot of kids on to the music". See Janis Ian, "The Internet Debacle: An Alternative View", *Performing Songwriter Magazine* (2002). Similarly, Michael K. Powell, Chairman Federal Communications Commission, wrote to RIAA to explain that his teenage daughter and son were encouraged to buy a CD after downloading and listening to the music from file sharing networks. See Katie Dean, "Record Stores: We're Fine Thanks", *Wired News* (March 20, 2004) available at, [http://www.wired.com/news/digiwood/0,1412,62742,00.html?tw=wn\\_story\\_related](http://www.wired.com/news/digiwood/0,1412,62742,00.html?tw=wn_story_related)

<sup>91</sup> See, "Franz Ferdinand Star Lectures on File Sharing", available at <http://www.nme.com/news/108349.htm>

<sup>92</sup> See Chapter 5, at 179-186.

<sup>93</sup> See Chapter 5, at 213-214.

Finally, the technology may generate a social space which enhances freedom of speech. The anonymity and easy accessibility of file sharing technology has already blurred the distinction between authors and readers, so that it is possible to promulgate a society which guarantees “everyone publishes” and “everyone consumes”<sup>94</sup> without the intervention of any government or organisation. As Fisher states in his “Semiotic Democracy” theory, the new core of information sharing means that ordinary citizens can be positive attendants instead of being the “altogether passive, uncritical recipients of the creations of the cultural industry”.<sup>95</sup>

On the one hand, anonymity in publishing and disseminating information on file sharing networks functions as via Freenet, Tor or BitTorrent,<sup>96</sup> etc., to relieve authors from a fear of political persecution or social evaluation. This is inherently of advantage for academic file sharing. As one of the principle human rights, freedom of speech is essential to the mission of academia. It is generally recognised that external repression from political groups or authorities may control and mislead the flow of information, prevent academic communication, and obstruct the development of knowledge.<sup>97</sup> Anonymity in file sharing technology helps to guarantee academic freedom of speech. For example, no matter wherever you are, even if there is Internet censorship and filtering<sup>98</sup>, once you have downloaded the Freenet software, you are equipped to express your own opinion regarding, say, political interference in Iraq, without the fear of being identified or censored. Moreover, a lack of centralised control in some file sharing networks such as Freenet or BitTorrent makes it impossible to forcibly delete or remove any files on the networks. In other words, with file sharing technology, you can express your opinion freely, and even governments do not have the capability of deleting your information from the

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<sup>94</sup> See Andy Oram, *supra* note 33, at 11.

<sup>95</sup> See Fisher, *supra* note 73, at 28-30.

<sup>96</sup> See Chapter 1, Part 1.1.2.3.3, at 23-27.

<sup>97</sup> See Bruce E. Johansen, *Silenced!: Academic Freedom, Scientific Inquiry, and the First Amendment under Siege in America*, Praeger Publishers (2007). See also, Evan Gerstmann and Matthew Streb, *Academic Freedom at the Dawn of a New Century: How Terrorism, Governments, and Culture Wars Impact Free Speech*, Stanford University Press, 1<sup>st</sup> ed. (2006).

<sup>98</sup> See, e.g., In China, the government restricts the use of the Internet through a system of filters to effectively assist government policy. See, “Freedom of Expression and the Internet in China”, available at, <http://www.hrw.org/backgrounder/asia/china-bck-0701.htm>. See also, Jonathan Zittrain and Benjamin Edelman, “Empirical Analysis of Internet Filtering in China”, Berkman Center for Internet and Society, Harvard Law School, available at [http://islandia.law.yale.edu/isp/digital%20cops/papers/zittrain\\_hackivism.pdf](http://islandia.law.yale.edu/isp/digital%20cops/papers/zittrain_hackivism.pdf).

network. Thus, file sharing technology makes people “more engaged, less alienated”.<sup>99</sup>

In parallel, the application of file sharing removes economic limitations for ordinary people to express their ideas. When *Tarnation*<sup>100</sup>, the first feature-length film edited on *iMovie*<sup>101</sup> was shown at the Sundance Festival, its entire cost was \$218.32; this surprised the whole world<sup>102</sup>. Since then many have made their own digital “movies” and posted them on networks to share with others. The emergence of recent Blog<sup>103</sup> and YouTube<sup>104</sup> technology makes it even cheaper to share user-generated content<sup>105</sup>. Compared to the high creative and distributing costs in the traditional forms of entertainment industry, file sharing technology provides ordinary people another opportunity to express their ideas freely. As Mark Stefik explains, file sharing technology provides authors and publishers “more, not less, control over their work”<sup>106</sup>.

Notwithstanding these benefits, this new technical invention has opened up new social challenges which concern groups of people subsequently damaged by file sharing technology. For instance, because of its total lack of filtering or controls, P2P networks have been used to store and swap pornographic and other harmful files. According to research by Jon Orwant, approximately “15.6% of media data stored on Freenet are pornographic, and around 53.8% of

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<sup>99</sup> See Fisher, supra note 73, at 31.

<sup>100</sup> “Tarnation” was a movie made by Jonathan Caouette with his digital video player to describe the family relationship and love between an insane mother and her son. See <http://www.i-saw-tarnation.com/>.

<sup>101</sup> See <http://www.apple.com/support/imovie/>

<sup>102</sup> Jason Silverman, “Here’s the Price of Fame: \$218.32”, *Wired news* (Jan 20, 2004) available at [http://www.wired.com/news/digiwood/0,1412,619700,00.html?tw=wn\\_tophead\\_2](http://www.wired.com/news/digiwood/0,1412,619700,00.html?tw=wn_tophead_2).

<sup>103</sup> “Blog” is a website where entries are commonly displayed in reverse chronological order. Blogs normally provide commentary or news on a particular subject. Until December 2007, there have been more than 112 million blogs, which covers entertainment, academic, news and all other social topics. See, “Welcome to Technorati” (2007) available at, <http://technorati.com/about>.

<sup>104</sup> “YouTube” is a video sharing website where users may upload, view and download video clips. YouTube was created in 2005, and it hosted about 6.1 million videos in August 2006. By February 2008, there are about 73,500,000 videos and 2,750,000 user channels on YouTube search. See, Lee Gomes, “Will All of Us Get Our 15 Minutes on a YouTube Video?” *The Wall Street Journal Online* (2006).

<sup>105</sup> “User-Generated Content (UGC)” refers to various kinds of media content, publicly available, that are produced by end-users. See Henry Jenkins, *Convergence Culture: Where Old and New Media Collide*, New York: New York University Press (2002). See also, Organisation of Economy Co-operation and Development, “Participative Web: User-Generated Content”, *DSTI/ICCP/IE* (2006)7/FINAL (2006).

<sup>106</sup> Mark Stefik, “Shifting the Possible: How Trusted Systems and Digital Property Rights Challenge us to Rethink Digital Publishing”, *Berkley Technology Law Journal*, Vol. 12 (1997) at 137.

current files consist of sex, drugs, and rock “n” roll images or videos”.<sup>107</sup> The personal and national security risks resulted from the application of file sharing networks also deserves particular attention. Without centralised servers, neither governments nor other organisations have the capability of tracking or deleting the information spread on file sharing networks, so that many companies and governments are worried about illegal information leak on networks. Concerned with this issue, both the Senate Judiciary Committee and House Government Reform Committee in the US have been trying to deal with the “dark side” of file sharing.<sup>108</sup> Nevertheless, the balance to be struck between protecting information security and applying file sharing technology may prove to be a long-term struggle given the burgeoning of anonymous file sharing technology.

The loss of revenues to rightsholders is one of the most important disadvantages of applying file sharing technology. Previous research has demonstrated that illegal downloading through file sharing networks may have a negative impact on content providers’ revenues, especially as regards the music industry.<sup>109</sup> Hence, as indicated in *Napster*<sup>110</sup> and *Grokster*<sup>111</sup> cases, rightsholders seem desperate to close down file sharing networks. As a technology, file sharing architecture itself is value-neutral. There is a correct concern in this thesis with how to use file sharing technology appropriately and legally for the benefit of society without undue cost to some parts of society, mainly rightsholders. This thesis provides a case study on file sharing in a very special copyright environment —research and education — to discuss how the interest of the public in innovative technology may be balanced against the detrimental results for rightsholders deriving from file sharing technology.

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<sup>107</sup> See Jon Orwant, “What’s on Freenet?” Available at, <http://www.openp2p.com/pub/a/p2p/2000/11/21/freenetcontent.html>

<sup>108</sup> See, e.g., the US Senate Committee of Judiciary has organised a series of hearings to deal with the conflict between applying file sharing and protecting national and personal security. Available at <http://judiciary.senate.gov/hearing.cfm?id=623>. See also, Athan Good and Aaron Krekelberg, *The Dark Side of a Bright Idea: Could Personal and National Security Risks Compromise the Potential of P2P File sharing Networks*, Senate Judiciary Committee, Washington D.C. (2003).

<sup>109</sup> See supra note 6.

<sup>110</sup> See supra note 5.

<sup>111</sup> See supra note 7.

## 1.2 File Sharing in Research and Education

Granting the rationale that research and education can generate socially beneficial, culturally significant knowledge dissemination, file sharing in that context enhances these public interests. We define this concept in detail at Part 1.3.1. below, comparing it with general (including entertainment) file sharing. In entertainment file sharing, the main concern is on enforcing the right of rightsholders to receive revenue from the use of their copyright works. “Rightsholders” in this thesis refer to the main body which holds the copyright, including not only content creators (i.e., authors and artists), but also intermediaries who have acquired rights from authors and publishers. Theoretically, in a market economy system, such balance can be obtained through the mechanism of free markets guided by a free price system.<sup>112</sup> However, “stakeholders”<sup>113</sup> in the field of academic file sharing are more complex in scope and definition. According to Deazley,<sup>114</sup> they include rightsholders (e.g., authors, commercial and non-commercial publishers etc) and public organisations which may serve to protect public interests (e.g., universities, libraries, collecting societies and government, etc.). Imbalance among these stakeholders’ interests may have a negative impact on academic resources used by university students, and even the wider public interest.<sup>115</sup> Thus, in this thesis I will analyse file sharing as used in the context of research and education, in search of an equilibrium between the public interest and rightsholders’ benefits.

### 1.2.1 Research and Education Defined

The word “education” stems from the Latin *educare*, meaning “leading out” or “leading forth”,

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<sup>112</sup> See Michael L. McKinney, *Environmental Science: Systems and Solutions*, Jones and Bartlett Publishers 1<sup>st</sup> ed. (2003) at 481. See also, Peter Wyatee, *Property Valuation: In an Economic Context*, Wiley-Blackwell Publishers (2007). See Takis Fotopoulos, *The Multidimensional Crisis and Inclusive Democracy*, Gordios Athens (2005) at 49.

<sup>113</sup> See Uma Suthersanen, “Copyright and Educational Policies: A Stakeholder Analysis”, *Oxford Journal of Legal Studies*, Vol. 23(4) (2003) at 585-609. See also, Ronan Deazley, *supra* note 79, at 1.

<sup>114</sup> See Ronan Deazley, *supra* note 79.

<sup>115</sup> See, e.g., As evidenced in the Science and Technology Committee’s Report on Scientific Publications, within the last ten years, journal production has increased 1/3, and the average price increase of 58% between 1998 and 2003, while library budgets have declined in real terms. Thus, the problem here is “as the cost of gaining access to academic research increases, the ability of the whole of the academic community to access the research which it produces decreases”. See Ronan Deazley, *supra* note 79, at 29. See Measure Susie, “Reed Elsevier Sees Net Revenues Soaring”, *The Independent* (August 6, 2004).

to suggest the scope for further development and expansion. “Education” is broadly defined as a social science which encompasses teaching and the learning of specific skills, in addition to something less tangible but more profound, such as the imparting of knowledge, good judgment and wisdom<sup>116</sup>. It indicates the many pathways open to individuals to derive benefits from lessons and materials from any social activities. Whether via the classroom teaching or by family education or even lessons derived from the struggles of daily life, all can be regarded as “education”. In a narrower sense, education is clearly profiled when “society or a group or an individual sets up a curriculum to educate people, usually the young”<sup>117</sup>. In other words, the phrase “education” applies to the teaching and learning process based on educational institutions and for educational purposes. Educational institutions, according to the definition used by SULAIR (Stanford University Library and Academic Information Resources), include K- 12 schools, colleges, universities, and some other nonprofit institutions such as libraries, museums, and hospitals when they are engaged in nonprofit instructional, research, or scholarly activities for educational purposes<sup>118</sup>. Educational purposes mean non-commercial teaching, study or investigation at non-profit educational institutions.<sup>119</sup>

The origin of the word “research” indicates one of its fundamental characteristics: the middle French language *recherche* literally means “to investigate thoroughly”. The *Concise Oxford English Dictionary* defines “Research [as] the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions”.<sup>120</sup> The essence of research, as the foundation of the scientific method, is to discover a particular subject by a “self-correcting” process. Generally, research is divided into “basic research” and “applied research”. Basic research, which is also called pure research or fundamental research, refers to the theoretical understanding and exploration of the relationships among variables<sup>121</sup>. Basic research

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<sup>116</sup> See *Dictionary*, supra note 2, at 455.

<sup>117</sup> *Ibid.*

<sup>118</sup> See “Stanford University Library and Academic Information Resources”, available at [http://fairuse.stanford.edu/Copyright\\_and\\_Fair\\_Use\\_Overview/chapter7/7-b.html#1](http://fairuse.stanford.edu/Copyright_and_Fair_Use_Overview/chapter7/7-b.html#1).

<sup>119</sup> *Ibid.* (According to SULAIR reports, educational purposes include: non-commercial instruction or curriculum based teaching by educators to students at nonprofit educational institutions; planned non-commercial study or investigation directed toward making a contribution to a field of knowledge, or; presentation of research findings at non-commercial peer conferences, workshops or seminars).

<sup>120</sup> See *Dictionary*, supra note 2, at 1222.

<sup>121</sup> See *The Need to Know v. The Need to Grow: Basic and Applied Research*, ELSI Project, Lawrence

is aimed at discovering and providing theoretical foundation for further applied research, rather than towards an end in practice. Applied research is, in turn, more focused on solving specific, practical problems, but is usually based on the results of basic research. In other words, the purpose of basic research is to “gain” knowledge for its own sake; while applied research is to describe the knowledge gained by basic research through a concrete example.<sup>122</sup> Considering the analysis in this thesis is mainly developed for higher education, the term research and education when used in this thesis will be defined as formal research and educational behaviours without commercial profit purposes, involving classroom teaching, professional research, or schooling, especially in the context of higher education.

Given that this thesis is based on the relationship between file sharing technology and intellectual property law principles, the most appropriate definition originates from a copyright law perspective. Copyright law begins with the basic principle that the copyright owner has exclusive rights to many uses of a copyrighted work, notably rights to reproduce, distribute, make derivative works, and publicly perform or show the work.<sup>123</sup> The exclusive rights of the owner, however, are not unlimited. As stated in the United States Constitution, “The Congress shall have the power...[T]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries...<sup>124</sup>”. The fields of education and research deserve particular attention when limiting copyright protection for owners, given that failure to secure this area has a negative impact on the progress of science and social development. This is especially so when the importance of research and education has at present been recognised within many copyright legislations, such as those of the U.S.A. and the U.K. Both have adopted statutes with explicit copyright exceptions and limitations in the domain of education and research. For example, in

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Berkeley National Laboratory, available at, <http://search.lbl.gov/Education/ELSI/research-main.html>

<sup>122</sup> Ibid.

<sup>123</sup> See, Copyright, Designs and Patents Act (CDPA) 1988, Chapter II, Rights of Copyright Owner- the acts restricted by copyright. See, e.g., CDPA s16(1) states that, “The owner of the copyright in a work has, in accordance with the following provisions of this Chapter, the exclusive right to do the following acts in the United Kingdom: (a) to copy the work; (b) to issue copies of the work to the public; (b(a)) to rent or lend the work to the public; (c) to perform, show or play the work in public; (d) to broadcast the work or include it in a cable programme service; (e) to make an adaptation of the work or do any of the above in relation to an adaptation.

<sup>124</sup> See, The United States Constitution, Article 1, Section 8, Clauses 1 and 8.



the UK CDPA (1988)<sup>125</sup>, Sections 29 to 36A state that fair dealing defence includes “research and private study<sup>126</sup>, criticism, review and news reporting<sup>127</sup>, things done for purposes of instruction or examination<sup>128</sup>, anthologies for educational use<sup>129</sup>, performing, playing or showing work in course of activities of an educational establishment<sup>130</sup>, recording by educational establishments of broadcasts and cable programmes<sup>131</sup>, and reprographic copying by educational establishments of passages from published work<sup>132</sup>”. The U.S. Copyright Act of 1976 also has limitations on exclusive rights in research and education, such as Section 107 of the Act indicates that, “the fair use of a copyrighted work, [...] for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright.” Additionally, in the four factors to determine whether the use made of a work in a particular case is a fair use, according to the US 1976 Act, “whether such use is of a commercial nature or is for nonprofit educational purposes”<sup>133</sup> should be considered.

At least two factors, according to the U.S. and the U.K. copyright limitations on research and education listed above, have led to the definition of research and education within copyright law. Firstly, non-commercial or non-profit nature is one essential characteristic of research and education. In *Basic Books, Inc. v. Kinko’s Graphics Corp.*<sup>134</sup>, Kinko’s was held to be a copyright infringer for selling photocopied book chapters to students without the agreement of copyright owners. The commercial purpose of Kinko’s copying and its direct effect on the market for the books resulted in its failure in the lawsuit. *Kinko* case indicates that research and education applied in copyright law requires nonprofit or non-commercial use. Even with non-commercial use, however, it does not follow that the copyright work can be used entirely freely, and for free.

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<sup>125</sup> See also, The Copyright and Related Rights Regulations 2003, s9-13. (These regulations provide amendment of provisions relating to research and private study, criticism, review and news reporting, as well as things done for the purposes of education).

<sup>126</sup> See, CDPA s29.

<sup>127</sup> See, CDPA s30.

<sup>128</sup> See, CDPA s32.

<sup>129</sup> See, CDPA s33.

<sup>130</sup> See, CDPA s34.

<sup>131</sup> See, CDPA s35.

<sup>132</sup> See, CDPA s36.

<sup>133</sup> See, The Copyright Act of 1976, U.S., s106, 106(a), 107.

<sup>134</sup> See *Basic Books, Inc. v. Kinko’s Graphics Corp.*, 758 F.Supp.1522 (S.D.N.Y.), 1991.

For example, in assembling a coursepack, the instructor should be responsible for obtaining clearance for the coursepack. Failure to do so may constitute an infringement without a coursepack permission agreement from the copyright owner. The instructors are usually required to pay an agreed sum of money to gain this permission agreement. In addition, students also have to pay for the coursepacks, rather than obtaining them for free. The only specific requirement is that pupils cannot be charged “more than the actual cost of photocopying”<sup>135</sup> in order to employ the material within fair use.

### ***1.2.2 Technologies of File Sharing in Research and Education***

As discussed above, advances in technology drive new conceptions of file sharing. Looking back over the historical record, at least three models have been adopted in sharing content related to research and education, with each categorised according to the specific technological conditions relied on. Corresponding to technologies of file sharing discussed in Part 1.1.2<sup>136</sup>, these three models of file sharing in the context of research and education include “the paper-based file sharing model”, “the web-based file sharing model”, and “the P2P file sharing model”. Each of the models has its benefits and limitations, and each of them originates from the specific technical context. The last two models reliant on digital technology, i.e., the web-based file sharing model and the P2P file sharing model, are the main concerns of this thesis.

#### **1.2.2.1. The Paper-Based File Sharing Model**

For the purposes of this thesis, “the paper-based file sharing model” refers to those traditional approaches which involve physical resource swapping methods. Under such a model, academic content typically takes the form of articles presented in professional journals, magazines or books, in order to be disseminated. *Nature*,<sup>137</sup> for example, is a prominent scientific journal. As

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<sup>135</sup> See “Education and Academic Permissions”, Stanford University Library and Academic Information Resources, available at, [http://fairuse.stanford.edu/Copyright\\_and\\_Fair\\_Use\\_Overview/chapter7/7-a.html](http://fairuse.stanford.edu/Copyright_and_Fair_Use_Overview/chapter7/7-a.html).

<sup>136</sup> See Part 1.1.2, at 12-27.

<sup>137</sup> “*Nature*” is an international weekly journal of science, which publishes full-length research papers in all disciplines of science. Since it was first published on 4 November 1869, it has been one of the most important journals in disseminating and sharing scientific knowledge among professional researchers and readers. According to a research, the journal has a circulation of around 65,000 but studies have concluded that on average the journal is shared by as many as 10 people. Available at,

a weekly publication which claims a readership of over 300,000 senior scientists and executives and over 600,000 total readers<sup>138</sup>, *Nature* has been serving as an important forum for the introduction and presentation of new advanced and original research across a wide range of scientific fields.

#### **1.2.2.2. The Web-Based File Sharing Model**

The web-based academic content sharing model, as exemplified by online journals, has been in existence for two decades. In fact, such a model is a replica of conventional paper-based system in the digital world. Similar to peer-review procedure in the context of traditional publishing environment, online journals adopt a process of “subjecting an author’s scholarly work or ideas to the scrutiny of others who are experts in the field”<sup>139</sup>. For instance, SCRIPT-ed is the online journal of the AHRC Research Centre for Studies in Intellectual Property and Technology Law based in the School of Law at the University of Edinburgh. The Editorial Board is assisted by an advisor board of internationally-renowned experts drawn from the disciplines of intellectual property, information technology, medical law, artificial intelligence, communications law and E-commerce. In the case of proposed publications, an editor sends the submitted article to researchers or scholars who are experts in the specific area. These referees each return an evaluation of the work, suggesting how the article can be improved. Referees’ evaluations usually decide whether an article can be published.

#### **1.2.2.3. The P2P File Sharing Model**

In the new world of peer-to-peer (P2P) file sharing, a number of intermediaries less obvious than “hosts” have been introduced, which have to some extent changed the way people achieve academic content. As discussed in Part 1.1.2.3<sup>140</sup>, P2P intermediaries do not typically host or

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<http://www.nature.com/nature/index.html>.

<sup>138</sup> See “Demographics: Nature”, Nature Publishing Group (NPG) 2008, available at, [http://www.nature.com/advertising/demographics/demographics.html?prod\\_code=NATURE&prod=Nature](http://www.nature.com/advertising/demographics/demographics.html?prod_code=NATURE&prod=Nature).

<sup>139</sup> See Susan van Rooyen, Fiona Godlee, Stephen Evans, Nick Black and Richard Smith, “Effect of Open Peer Review on Quality of Reviews and on Reviewers’ Recommendations: A Randomised Trial”, *BMJ*, Vol. 318 (1999) at 23-27.

<sup>140</sup> See Part 1.1.2.3, at 15-27.

transmit academic files. Instead, they enable users who have downloaded certain P2P software to then swap and share academic files stored in their own computers. Let us take a look at an example of academic file sharing network. LionShare<sup>141</sup> is an innovative P2P technology proposed and developed by Penn State University, MIT and British Columbia's Simon Fraser University in Canada, the aim of which is to facilitate legitimate file sharing tools for the exchange of "academic, personal and work-related materials among institutions around the world"<sup>142</sup>. Technically, LionShare protocol is a hybrid P2P structure. As shown in *Figure 10*,<sup>143</sup> there are three basic elements in LionShare topology: Peer, PeerServer and the supporting networking. The end-users of LionShare (e.g., the Peers) share and swap files equally and locally. Users have the ability to upload and manage files and metadata located on the PeerServer. When queries are initiated on the LionShare network, files stored on the PeerServer are listed in the same manner as files shared locally running on the LionShare Peer client. As to the LionShare Network, it basically remains the same structure to that of Gnutella. Any peer can be the host to run on a local file sharing network when peers connect to the LionShare. Thus, LionShare is designed on the basis of both decentralised structure and centralised topology, since it is intended to share files including education and research related content, rather than more "general purpose" Internet file sharing<sup>144</sup>.

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<sup>141</sup> LionShare is a secure P2P file sharing trial application for higher education, enabling legal file sharing for Penn State University and beyond. Find and share legal academic content in a secure P2P environment. Available at, <http://lionshare.psu.edu/>

<sup>142</sup> See "Connecting and Extending Peer-to-Peer Networks", *A Penn State Proposal to the Andrew W. Mellon Foundation* (2003), available at, [http://www.lionshare.its.psu.edu/main/info/docspresentation/lionshare\\_mellon\\_pdf](http://www.lionshare.its.psu.edu/main/info/docspresentation/lionshare_mellon_pdf).

<sup>143</sup> Ibid.

<sup>144</sup> See supra note 144, at 10.

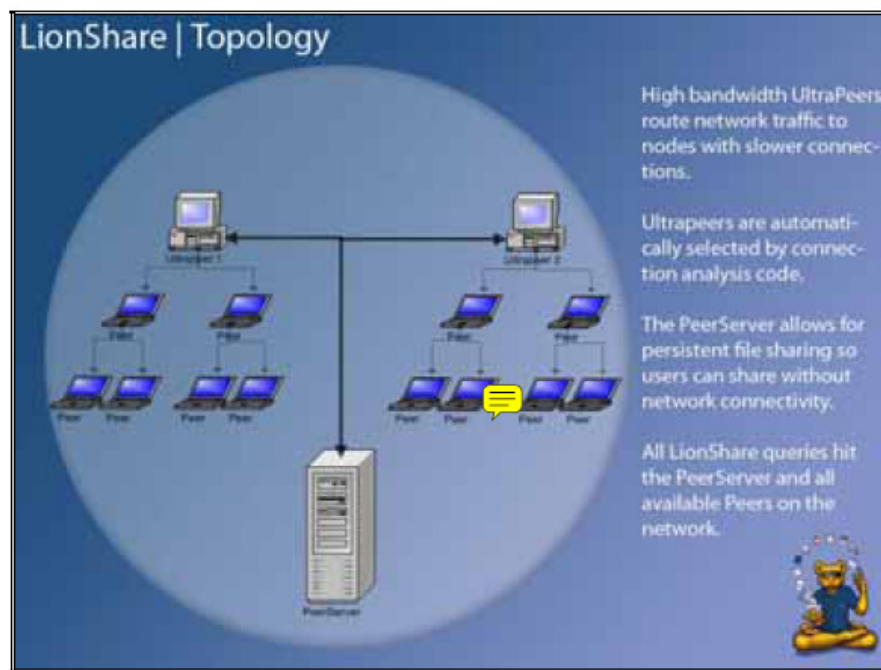


Figure 1. LionShare

#### LionShare Centralized+Decentralized Topology

Figure 10. LionShare Topology

As discussed in detail in Chapter 5<sup>145</sup>, each of the models has its own advantages and disadvantages. Generally speaking, the application of digital file sharing, especially P2P technology, in the context of research and education provides our scholars, faculty and students with more opportunities to access academic content, more efficient ways of sharing ideas, and more effective control of the files being shared. However, there are some critical concerns about the practicality of such file sharing systems. As with the traditional paper-based file sharing, the web-based academic file sharing model also suffers from low efficiency, proneness to bias, potentially anti-innovatory effects, and inability to detect fraud.<sup>146</sup> For P2P file sharing, on the other hand, the questions as to whether academic content shared on P2P systems is reliable, and how academic authors can collect remedies, either substantial or unsubstantial, from sharing their copyright works, deserve further research.<sup>147</sup>

<sup>145</sup> See Chapter 5, at 213-215.

<sup>146</sup> Ibid.

<sup>147</sup> Ibid.

## 1.3 Fair Use and File Sharing in Research and Education: The Problem

The application of file sharing technology in research and education has presented many opportunities for academia. Such an important issue, however, is almost neglected or avoided in legal practice. Recent file sharing lawsuits, such as *MP3.Com*<sup>148</sup> and *Napster*,<sup>149</sup> have all emphasised the copyright infringement caused by the application of file sharing networks, ignoring potential lawful uses of such systems. Through comparing academic uses with general applications of file sharing technology, we can analyse the reasons that academic file sharing deserves particular copyright attention.

### 1.3.1 Academic File Sharing v. General File Sharing

Academic file sharing may be considered as an application of file sharing technology, but it can be distinguished from general file sharing, especially entertainment file sharing, in a number of ways. For the purposes of this thesis, the application of file sharing can be categorised as “academic file sharing” and “general file sharing”. Academic file sharing refers to those digital file sharing networks which mainly involve research and educational content dissemination and exchange, while other uses of fair sharing technology, especially in the form of entertainment file sharing are considered as general file sharing. The following is an illustrative summary of how academic file sharing can be differentiated and may assist in understanding why it may require special copyright protection. We consider these issues in depth in Chapter 2 and 3.

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<sup>148</sup> See *MP3.com*, supra note 36.

<sup>149</sup> See *Napster*, supra note 5.

	General File sharing	Academic File sharing
Purposes	Obtain entertainment files for free, or less than market price, or if out of catalogue <sup>150</sup>	Improve academic communication and knowledge dissemination <sup>151</sup>
Social/Cultural Influences	Carelessness in copyright infringement <sup>152</sup>	Public interest / Social benefits <sup>153</sup>
Economic Influences	Copyright rightsholders' loss in market interest <sup>154</sup>	Public rights of access to knowledge
Legal Influences	Potential copyright infringement <sup>155</sup>	Fair use doctrine <sup>156</sup>

**Figure 11.** *Comparison between General File Sharing and Academic File Sharing*

#### 1.3.1.1. General File Sharing

Since the emergence of file sharing technology, most people who engage in file sharing on Internet have swapped entertainment files, such as music files or movies. A number of academic papers have asserted that an incredibly large amount of copyright files have been shared through general file sharing.<sup>157</sup> It is reported that 2.79 billion files had been transferred in February of 2001 and by August of that year the files transferred on four leading Napster replacement (i.e., FastTrack, Audiogalaxy, iMesh and Gnutella) had reached above 3.05 billion per month.<sup>158</sup> Kwok's study on Gnutella downloading trends highlighted a continuing increase in queries

<sup>150</sup> See Part 1.1.3, at 28-34.

<sup>151</sup> See Part 1.3.1.2, at 46.

<sup>152</sup> See Chapter 2 and 3.

<sup>153</sup> Ibid.

<sup>154</sup> Ibid.

<sup>155</sup> Ibid.

<sup>156</sup> Ibid.

<sup>157</sup> See e.g., Levine M. Boldrin, "The Case Against Intellectual Property", *International Economic Review*, Vol. 45 (2) (2004) at 327-350. See also, Stan J. Liebowitz, "Pitfalls in Measuring the Impact of File sharing", *CESifo Economic Studies* (2005). Stan J. Liebowitz, "The Elusive Symbiosis: The Impact of Radio on the Record Industry", *Review of Economic Research on Copyright Issues*, Vol. 1 (2004) at 20-45. See also, Norbert, J. Michel, *The Impact of the Digital Age on the Music Industry: A Theoretical and Empirical Analysis*, University of Orleans, 2<sup>nd</sup> ed. (2003).

<sup>158</sup> See Stan J. Liebowitz, "File sharing: Creative Destruction or Just Plain Destruction?" *Journal of Law and Economics*, Vol. XLIX (2006) at 6. See also, John Gerald, "Music Downloads on the Rise", *VNUnet.com* (2001).

specifying video and audio files, from 25.09% in 2002, to 35.20% in 2004.<sup>159</sup> More recently, BigChampagne LCC has found that around one billion songs a month were being traded on illegal file sharing networks in 2007.<sup>160</sup>

The large-scale phenomenon of copyright works being shared through file sharing networks has a negative impact on rightsholders' market interest. The data collected by National Association of Recording Merchandisers shows that "while overall music purchases increased in 2005 to more than a billion transactions from 817 million transactions in 2004, the share of those purchases that were on CD fell to 650 million in 2005, or 36 percent of total sales, from 708 million, or 39 percent of total sales, in 2004".<sup>161</sup> An article posted in the Wall Street Journal found that CD sales have dropped 20% since 2006.<sup>162</sup> Thus, the music industry, along with other media such as film and TV are having a difficult time adapting to the digital age.

In order to maintain their market interest, entertainment industries have initiated copyright litigations against file-sharers and file sharing intermediaries since 1999. Recent cases, like *MP3.Com*<sup>163</sup>, or *Napster*,<sup>164</sup> as well as *Grokster*<sup>165</sup>, have highlighted the conflict between general file sharing and copyright rightsholders' interest. These were discussed in details below.<sup>166</sup>

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<sup>159</sup> See Sai Ho Kwok, *P2P Searching Trends: 2002-2004*, Information Processing and Management, Pergamon Press (2006) at 237-247.

<sup>160</sup> See Ethen Smith, "Sales of Music, Long in Decline, Plunge Sharply", *Wall Street Journal* (March 21, 2007), Available at, [http://online.wsj.com/article\\_email/SB117444575607043728-IMyQjAxMDE3NzI0MTQyNDE1Wj.html](http://online.wsj.com/article_email/SB117444575607043728-IMyQjAxMDE3NzI0MTQyNDE1Wj.html).

<sup>161</sup> See John Wilen, "Internet Killed the Music Store? Almighty Institute of Music Retail" (2007) available at, <http://www.almightyretail.com/design/newpress.php?incpage=phillyburbs>.

<sup>162</sup> See supra note 145.

<sup>163</sup> See *MP3.com*, supra note 36.

<sup>164</sup> See *Napster*, supra note 5.

<sup>165</sup> See *Grokster*, supra note 7.

<sup>166</sup> See Chapter 3, at 107-120.



### 1.3.1.2. Academic File Sharing: The Social Benefits

As detailed and discussed in Chapter 5<sup>167</sup>, access to educational and social information helps to serve the public interest. With academic file sharing, students, faculty and scholars have more opportunities to access academic content, more efficient ways to share information, and more effective control over the files being shared. The following will explore several scenarios experienced by faculty and students in their research and education practice, in order to demonstrate how academic file sharing can encourage academic communications, speed scientific discoveries, and promote social progress. Please note that in these scenarios, copyright problems are not considered. In other words, let us imagine all involved in these scenarios wish to share their works with others freely.

#### Scenario 1.

*Mary, a lecturer of Intellectual Property Law in Edinburgh Law School, is assembling her course materials for the LLM course. In order to compile a list including fifty U.K. and U.S .cases related to moral rights, she spent almost two days searching cases in libraries and various websites. Meantime, Julia, an Intellectual Property Law lecturer of Southampton University, is also spending the same amount of time in case searching. Several lecturers and professors in colleges have also duplicated this task. If Mary and Julia have never met before, is there any possibility they might communicate with and without academic file sharing networks?*

Under the current circumstances, there are two options to allow Mary and Julia to fulfill the task. On the one hand, each of them has to spend the same amount of time and energy searching for the cases individually. Alternatively, it would seem to be more efficient to communicate with their colleagues by asking for help. For a faculty member who works in the same department or in a related field, the other member in search of information would likely be inclined to ask for help if she knew someone had it. At the same time, the faculty member who owns a personal collection of information might well be happy to share what they already had if need be

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<sup>167</sup> See Chapter 5, Part 5.2, at 186.

known.<sup>168</sup> Nevertheless, faculty members may not have much opportunity to obtain information from others' personal content collections. For instance, it may be difficult for Mary and Julia to acknowledge each other and agree to cooperate. As far as existing ways of sharing information go, most faculty members would be unlikely to have access to a large number of personal collections in traditional practice.

With the application of file sharing networks, a faculty member may easily introduce and make his personal collection accessible to people with similar academic interests, and easily access others' collections. In Mary and Julia's example, they can find each other's collection in file sharing networks such as LionShare, and hence they may be able to discuss and cooperate with each other. In this sense, file sharing in research and education field could reduce "the amount of man-hours required assembling media for lesson plans".<sup>169</sup>

## **Scenario 2.**

*A History of Utah class has an assignment to outline "who the significant mountain men in Utah's History where and what impact mountain men had upon the region"<sup>170</sup>. Over the past few years some students who attended the same course have undertaken the research within the related field, and they have valuable class notes about the topic.*

In general practice, the current students are going to spend much time in material searching and sorting. As happens to many students, some textbooks and journal materials they require, especially the older versions of books, might be out of stock in the students' library. For those students who have already researched in this topic, it is hard to find ways of sharing their collections with others even if they would be happy to use this as an opportunity to share their achievements and obtain feedback.

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<sup>168</sup> See LionShare, supra note 142, at 14.

<sup>169</sup> Ibid.

<sup>170</sup> This question is chosen from EduCommons Website: [http://ocw.usu.edu/Courses/department.2004-12-29.9286476474/course.2005-01-08.2862528806/ecdocument.2005-01-15.2253099314.htm/ECDocument\\_view](http://ocw.usu.edu/Courses/department.2004-12-29.9286476474/course.2005-01-08.2862528806/ecdocument.2005-01-15.2253099314.htm/ECDocument_view). The course was offered by Professor John Barton, a Senior Lecturer of History Department in Utah State University.

The academic file sharing network would allow previous students to provide their used class notes or essays to a group of current students granted access. In addition, through the employment of new technology, the group of current students would also exchange information they have with each other, thus most likely encouraging discussion amongst people with such as these similar interests. In this case, the author does not suggest a short-cut for students to finish their assignments. Here is a solution for encouraging academic communications, for saving time, and also for enhancing the capability of free expression.

### **Scenario 3.**

*Rose, a professor of Architecture Department, collected thousands of digital photographs and pictures about carved statues smaller than 1 inch in size from all round Europe. She uses some of them for classroom teaching but most of the images have not been seen by other faculty and scholars.*

This is a typical phenomena performed by thousands of faculty and scholars. Many scholars have personal academic collections that contain surprising content, and who are eager to share information with others. In current practice, however, few specific and safe academic networks have been explored in order to alleviate what amounts to a matchmaking problem. The application of academic file sharing architectures would provide Rose and other scholars with an easy way to share her photography collection with those who share similar academic interests.

The incentives for providing more “hidden”<sup>171</sup> academic content to instructors, scholars, researchers and students suggest that allowing scenarios mentioned above into practice should not be surprising. On the one hand, there are a huge number of target populations who are interested in and able to benefit from academic file sharing. For example with academic images

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<sup>171</sup> “Hidden content” was mentioned in LionShare Proposal to describe the content that “is hidden in the sense that other potential users at their own and other institutions have no way to discover these resources”. For instance, the files stored in faculty or students’ personal computers. See, “Connecting and Extending Peer-to-Peer Networks”, *A Penn State Proposal to the Andrew W. Mellon Foundation* (2003) at 1.

sharing, the evidence stated in the Vision Image User Study (VIUS)<sup>172</sup> reports is very impressive. 75.4 percent of faculty and 55 percent of students admitted that they use images in some digital forms for educational and research purposes. More than 62 percent of faculty and more than 56 percent of students agreed or strongly agreed the effect and efficiency of such file sharing systems<sup>173</sup>. Moreover, target populations are expected to increase. According to the VIUS Reports, more than 25 percent of faculty and 33 percent of students plan to increase their use of digital and analog images<sup>174</sup>.

On the other hand, the amount of potential academic file sharing content is surprising. A survey conducted by Penn State's Teaching and Learning with Technology unit<sup>175</sup>, which extracted random samplings of 2500 Penn State faculty and teaching assistants, reported that 51 percent of faculty reported having a personal collection of digital images used for professional purposes. According to the VIUS survey, 44.1 of faculty reported that they "personally maintain or oversee the maintenance of a collection of analog or digital images for professional use".<sup>176</sup> Additionally, a significant percentage of students keep personal collections of educational content. For instance, 23.9 percent of the students attending the VIUS survey have personal collections of pictures or photographs for "educational or research" use.<sup>177</sup> The VIUS Reports also indicate the desire of people to share individual collections with others. Around 33.5 percent of faculty responded positively to sharing digital images, and even more say that "they would be willing to share" if some conditions are fulfilled<sup>178</sup>. Those with their personal collections of digital educational and research content are and will be important potential users for and of academic

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<sup>172</sup> See, "The Visual Image User Study (VIUS) Report", available at: <http://www.libraries.psu.edu/vius/reports.html>. VIUS Report was based on a survey on "needs for digital image delivery at the Pennsylvania State University through a rigorous process of broad-based and interdisciplinary user study, through prototyping services, and assessing those prototypes". The survey took a period of 29 months and submitted a series of 27 specific VIUS Reports.

<sup>173</sup> See VIUS Reports 2.3 General Survey of Faculty, questions #1, #13, and #14, and VIUS Reports 2.4 See General Survey of Students, questions #1 and #14. See also, VIUS Reports 3.1 Faculty Focus Groups on Luna's Insight, Table 1. Available at: <http://www.libraries.psu.edu/vius/2.3.pdf>. <http://www.libraries.psu.edu/vius/2.4.pdf>. <http://www.libraries.psu.edu/vius/3.1.pdf>.

<sup>174</sup> Ibid.

<sup>175</sup> Jim Kerlin, "FACAC Faculty Survey 2002", available at: <http://tlt.its.psu.edu/surveys/spring2002/faculty2002.html>

<sup>176</sup> See VIUS Reports 2.3, supra note 173.

<sup>177</sup> See VIUS Reports 2.4 General Survey of Students, question #12. Available at: <http://www.libraries.psu.edu/vius/2.4.pdf>.

<sup>178</sup> See *VIUS Executive Summary Report*, available at: <http://www.libraries.psu.edu/vius/Executive%20Summary.pdf>.

file sharing networks.

Although academic file sharing architecture is still in its early stage, the application of file sharing technology in research and education, such as with LionShare and EduCommons, provides supporting actions and interfaces towards positive academic content exchange.

### ***1.3.2 Fair Use and Academic File Sharing***

Based on the belief that the application of file sharing technology in research and education may help to generate dissemination of knowledge without interfering with the incentives and rewards that copyright provides to authors and owners, academic file sharing deserves particular protection. Of the various defences which an academic file sharing defendant may rely on when sued for copyright infringement, perhaps the most well-known one is fair use doctrine in U.S. copyright law, also known as fair dealing doctrine in UK copyright legislation.

It is prudent here to define the term “fair use” in this thesis, where it is used in a broad sense. “Fair use” in this thesis refers to an exception which a user may rely on when sued for copyright infringement. Broadly speaking, there are three different approaches that have been taken to the provision of copyright exceptions in current legislations. The first approach is to provide general worded exceptions, such as general fair use doctrine in the US law<sup>179</sup>. The second approach, as exemplified by *French Code de la propriété intellectuelle*<sup>180</sup>, is to provide a well-defined and specified limitation to copyright law. The third approach, as with UK fair dealing defence<sup>181</sup>, not only involves statutory definition of fair dealing doctrine, but also admits a case-by-case examining system. Here, we use “fair use” as a general term to embrace all three copyright exceptions. These will be discussed in detail below.<sup>182</sup>

Such principles have also been discussed in worldwide case law. In the UK case of *Sillitoe and*

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<sup>179</sup> See United States Copyright Act 1976, Section 107.

<sup>180</sup> See Code de la propriété intellectuelle, L.122-5.

<sup>181</sup> See UK Copyright, Design and Patent Act (CDPA) 1988, Section 29 (1).

<sup>182</sup> See Chapter 2, Part 2.4, at 83.

*Others v. McGraw-Hill Book Co.(UK) Ltd.*, [1983] F.S.R. 545,<sup>183</sup> the Court granted that the importer and distributor of study aids “could not avail themselves of the exceptions of [fair dealing doctrine] since they were not engaged in private study or research but were merely facilitating this for others”.<sup>184</sup> Similarly, the Court in *University of London Press v. University Tutorial Press* [1916]<sup>185</sup> interpreted that the use of an educational institution was not for the purpose of private study. A Canadian Supreme Court decision<sup>186</sup> defines that the fair dealing exception “is open to those who can show that their dealings with a copyrighted work were for the purpose of research or private study”. The decision of General Division of the Federal Court of Australia in the case of *De Garis and Another v Neville Jeffress Pidler Pty Ltd* (1990) 37 FCR 99,<sup>187</sup> and the New Zealand Court decision in *Longman Group Ltd. v. Carrington Technical Institute Board of Governors*, [1991] 2 NZLR 574,<sup>188</sup> further extended the relationship between research and education with fair use doctrine.

In copyright history, the issue of fair use doctrine has been at the very heart of the copyright debate. On the one hand, if rightsholders’ exclusive rights expand without fair use, this could lead towards copyright oppression and monopoly.<sup>189</sup> On the other hand, too many exceptions may damage the rightsholders’ financial revenues, arguably undermining a creative motivation factor.<sup>190</sup> Thus, fair use doctrine has been struggling in balancing rightsholders’ benefits and public interests, in regard to the purposes of research and education.

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<sup>183</sup> See *Sillitoe and Others v. McGraw-Hill Book Co. (U.K.) Ltd.* [1983] F.S.R. 545 (Ch. D.)

<sup>184</sup> Ibid.

<sup>185</sup> See *University of London Press v. University Tutorial Press* [1916] 2 Ch. 601.

<sup>186</sup> See *CCH V. Law Society of Upper Canada* [2004] SCC 13.

<sup>187</sup> See *De Garis and Another v Neville Jeffress Pidler Pty Ltd* (1990) 37 FCR 99. (In this case, the Court decided to extend the principle in *Sillitoe* to a situation where a commercial enterprise actively monitored certain subjects in the news and provided clients with photocopies of related media articles.)

<sup>188</sup> See *Longman Group Ltd. v. Carrington Technical Institute Board of Governors* [1991] 2 NZLR 574 (H.C.) (This case concluded that the use for research or private study must be that of the compiler.)

<sup>189</sup> See, e.g., Michael J. Madison, “A Pattern-Oriented Approach to Fair Use”, *William Mitchell and Mary Law Review*, Vol. 45 (2004) at 1525. See also, William W. Fisher, “Reconstructing The Fair Use Doctrine”, *Harvard Law Review*, Vol. 101 (1988) at 1659. See, Wendy Gordon, “Fair Use as Market Failure: A Structural and Economic Analysis of the Betamax Case and Its Predecessors”. *Columbia Law Review*, Vol. 82 (1982) at 1600. See also, William F. Patry and Richard A. Posner, “Fair Use and Statutory Reform in the Wake of Eldred”, *California Law Review*, Vol. 92 (2004) at 1639

<sup>190</sup> See e.g., Pierre N. Leval, “Toward a Fair Use Standard”, *Harvard Law Review*, Vol. 103 (1990) at 1105. See also, Neil Turkewitz, “Copyright, Fair Use and the Public Interest” (2004) available at, <http://www.culturalpolicy.org/commons/comment-print.cfm?ID=22>.

The recent attempts by digital music swapping pioneers<sup>191</sup> demonstrate that changing technological circumstances have sharpened the dramatic conflict between rightsholders' interest and fair use practice. As we shall see in Part II, there is no consensus of opinion on whether, how, and to what extent the fair use doctrine is integral to digital file sharing legal practice. This thesis therefore intends to contribute to the theoretical understanding of fair use doctrine in practice in the context of digital file sharing.

## 1.4 Conclusion

The problem this chapter addresses is summarised below:

We defined the use of “file sharing” in this thesis. Defined as “the digital file being shared inside a network, whether downloaded, uploaded, or both”, file sharing here includes web-based file sharing and P2P file sharing models. Following, the evolution of file sharing technology helps us to keep track of how file sharing technology came into being and continues to influence the development of legal practice. As a neutral technology, file sharing itself is not a problem. Deserving of particular attention is how the new technology might be used appropriately to maintain the balance between the benefits of rightsholders' and public interest in the context of research and education.

A focus on file sharing in the context of research and education is used in this thesis. “Research and education” is clarified as “research and education behaviour without commercial profit purposes”. Three research and education file sharing models were highlighted for review — *Nature*, *SCRIPT-ed*, and *LionShare*, with major emphasis and focus on the last two as digital file sharing venues as, respectively, examples of web-based academic file sharing, and P2P academic file sharing.

Subsequently, there followed a review of the new opportunities in academic areas which file sharing technology brings. In the comparison between academic file sharing and general file

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<sup>191</sup> See, e.g., *MP3.com*, *Napster*, *Grokster*; supra note 5, 7, 36.

sharing, especially in the form of entertainment file sharing, there is a body of evidence noting the ways and opportunities this technology affords us to promote academic communication, social knowledge dissemination, and in the wider public interest.

Thus can we nurture the idea that, as a neutral technology which can benefit society, file sharing in research and education deserves protection? In fact, current copyright legislation already justifies exceptions to guarantee the public interest in legitimate access to make use of, and exchange copyright protected works. Of the various copyright doctrines, fair use/fair dealing is the most well-known defence an academic file sharing defendant may rely on when sued for copyright infringement.

The fair use/fair dealing doctrine has emerged from the conflict between protecting copyright owners' exclusive rights and preventing such rights from being monopolistic. Witnessed by the numerous debates about how to define this doctrine, the development of file sharing technology has served to complicate the situation further. As we shall see from Part 2., recent case laws have been too focused on regulating the infringing use of the technology, impeding the use of fair use doctrine in lawful file sharing applications, such as academic file sharing. These problems will be subject to scrutiny in the following chapter.



## Part II. Fair Use and File Sharing

### Chapter 2. The Baseline: Fair Use Doctrine and Legal Practice

In Chapter 1, it has been established that scholars and researchers can benefit from use of file sharing technologies for socially beneficial purposes, such as creating knowledge and assisting learning. Fair use is the basic means by which copyright law prevents the “tyranny of copyright”<sup>1</sup> and inspires the “creative system”<sup>2</sup> of authors and copyright owners, striking a balance between socially beneficial uses of copyright materials, and the interests of rightsholders to receive a return on their work.

Fair use doctrine has been described as the most troublesome copyright principle<sup>3</sup> due to its flexibility and uncertainty in legal practice. As mentioned in Chapter 1<sup>4</sup>, the term “fair use” in this thesis refers to an exception that a defendant may rely on when sued for copyright infringement, no matter whether it is named “fair use” in U.S. Copyright Act or “fair dealing” within U.K. copyright law. Since the first judge-defined concept of fair use arose in 1841<sup>5</sup>, generations of scholars, judges and lawyers have struggled to balance rightsholders’ benefits

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<sup>1</sup> See Robert S. Boynton, “The Tyranny of Copyright”, *New York Times* (January 5, 2004). See also, Lawrence Lessig, *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*, Penguin Publisher (2004). See Daniel Harris, “Fair Use Act: Reforming Digital Copyright”, *E-Commerce Law and Policy*, Vol. 9(3) (2007) at 12-13. See also, Marketa Trimble Landova, “The Potential Worldwide Application of the US Fair Use Defence”, *E.I.P.R* Vol. 30(1) (2008) at 38-40. See, Matthew Sag, “God in the Machine: A New Structural Analysis of Copyright’s Fair Use Doctrine”, *Michigan Telecommunication Technology Law Review*, Vol. 11 (1) (2005) at 1. Yochai Benkler, “Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain”, *New York University Law Review*, Vol.74 (1999) at 354.

<sup>2</sup> See Lessig, *supra* note 1, at 130.

<sup>3</sup> See *Dellar v. Samuel Goldwyn, Inc.*, 104 F.2d 661,662 (2d Cir.1939). (This fair use case was one of the typical cases to measure the unique complexity and difficulty of fair use doctrine analysed by Justice Story.) See, *Folsom v. Marsh*, 9F.Cas. 342, 344-345 (Cir. Ct.Mass. 1841). (*Dellar* stated that Justice Story’s formulation (9 F. Cas. at 348) did not differ much from the 1976 codification by Congress in Section 107 of the Copyright Act, 17 U.S.C. <sup>1</sup> 107).

<sup>4</sup> See Chapter 1, Part 1.3.2, at 50.

<sup>5</sup> *Folsom v. Marsh*, 9F.Cas. 348 (Cir. Ct.Mass. 1841) *supra* note 3. (In *Folsom*, Justice Story stated that courts should “look to the nature and objects of the selections made, the quantity and value of the materials used and the degree in which the use may prejudice the sale or diminish the profits or supersede the objects of the original work”, which turned out to be the foundation of the four-factor fair use doctrine in the United States Copy Act, 1976).

with the public interest, “with little success”.<sup>6</sup> Most cases originated in the USA and focused on a dispute about the meaning of the four-factor listed in Section 107 of the United States Copyright Act 1976, i.e., the purpose and character of the use<sup>7</sup>, the nature of the copyrighted work<sup>8</sup>, the amount and substantiality of the portion used in relation to the copyrighted work as a whole<sup>9</sup>, and the effect of its use upon the potential market for the copyrighted work<sup>10</sup>. Recent P2P music swapping cases, such as *MP3.Com*<sup>11</sup>, *Napster*,<sup>12</sup> and *Grokster*<sup>13</sup>, have highlighted the uncertainty of fair use in the context of changing technology.

Different countries have adopted different policies to define fair use doctrine, resulting in wide variations in practice between and even within legal systems. For instance, some treaties such as the Berne Convention require the countries of the Union “shall” adopt limitations and exceptions on the “right of reproduction” of copyright owners in their legislations<sup>14</sup>. Others leave the member states or contract parties with an “option”, compared with the “mandate” on copyright fair use. European Union Directives, such as the EC Information Society Directive<sup>15</sup>,

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<sup>6</sup> See Michael J. Madison, “A Pattern-Oriented Approach to Fair Use”, *William and Mary Law Review*, Vol. 45 (2004) at 1525. See also, William W. Fisher, “Reconstructing the Fair Use Doctrine”, *Harvard Law Review*, Vol. 101 (1988) at 1659. See, Melissa De Zwart, “A Historical Analysis of the Birth of Fair Dealing and Fair Use: Lessons for the Digital Age”, *I.P.Q.* Vol. 1 (2007) at 60-91. See also, Tony Ballard, “Fair Use and Fair Dealing”, *Entertainment Law Review*, Vol. 17(8) (2006) at 239-241. See, Wendy Gordon, “Fair Use as Market Failure: A Structural and Economic Analysis of the Betamax Case and Its Predecessors”, *Columbia Law Review*, Vol.82 (1982) at 1600. See also, William F. Patry and Richard A. Posner, “Fair Use and Statutory Reform in the Wake of Eldred”, *California Law Review*, Vol. 92 (2004) at 1639.

<sup>7</sup> See e.g., *Newspaper Licensing Agency v. Marks & Spencer* [2000] 4 All ER 239,257, CA. See also, *Pro Sieben Media v. Carlton Television* [1999] FSR 610,620.

<sup>8</sup> See e.g., *Hyder Park v. Yelland* [2000] EMLR 363,378. (This case was to establish whether it could be fair dealing to use a work that had not been published).

<sup>9</sup> See e.g., *Hubbard v. Vosper* [1972] 2 QB 84, 94-95. (The case was related to a parishioner quoting an epitaph on a tombstone in the churchyard). See also, *Zamacois v. Douville* [1943] 2 DLR 257, which stated that the copying of an entire work was not fair dealing.

<sup>10</sup> See e.g., *Newspaper Licensing Agency v. Marks & Spencer*, supra note 7. (The decision of the case indicated that the commercial benefit driven by the defendant could be a factor to against fair dealing).

<sup>11</sup> See *UMG Recordings, Inc. v. MP3.Com*, 92 F. Supp. 2d 349, 351 (SDNY). [Hereinafter, *MP3.com*, in brief]

<sup>12</sup> See *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004 (9<sup>th</sup> Cir. 2001). [Hereinafter, *Napster*, in brief]

<sup>13</sup> See *MGM Inc v. Grokster Ltd* 259 F. Supp. 2d 1029 (C.D. Cal. April, 2003). *MGM Inc. v. Grokster Ltd* al Supreme Court (04-0480) 545 U.S., 125 s. Ct. 2764 (2005) See also, *Grokster*, certiorari to the united states court of appeals for the ninth circuit, No. 04-480. (June 27, 2005). [Hereinafter, *Grokster*, in brief]

<sup>14</sup> See Berne Convention for the Protection of Literary and Artistic Works 1886, Article 9. See also, Article 13 of Agreements of Trade-Related Aspects of Intellectual Property Rights. [Hereinafter, *TRIPs*, in brief]

<sup>15</sup> See Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the

Council Directive on Rental Right<sup>16</sup>, and EC Database Directive<sup>17</sup>, are well-known examples in which fair use exceptions and limitations are stated as something which “*may*” be adopted by “Member States” within the rights related to intellectual property. The lack of harmonisation in adopting fair use leads to difficulties in examining what fair use doctrine implies or embodies, and how to practice it in legal practice.

Within current legislative practice there are three legal regimes regarding legitimate access to, and making use of, copyright works. The first, known as *open-ended doctrine approach*, is to set out a general doctrine of fair use, such as the fair use within the United States Copyright Act<sup>18</sup> and the Philippine Intellectual Property Code 1997<sup>19</sup>. According to this approach, “[as long as] the court is satisfied that the use is fair, there will be no infringement”.<sup>20</sup> The second approach deploys an exhaustive enumerated list to define and explain the fair use conduct. This *exhaustive enumerated approach* has been adopted in most civil law legislations, for example, Article L122-5 of *Code de la propriété intellectuelle*<sup>21</sup>. The “*fair dealing*” approach is the third type applied to most common law countries such as the U.K. When considering a copyright infringement case, the UK court not only adopts statutory description about fair dealing conducts, but also makes the decision on a case-by-case basis. Compared to the first two approaches, the fair

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harmonization of certain aspects of copyright and related rights in the information society, Article 5 (O.J.2001 L 167/010) [Hereinafter, *EC Information Directive*, in brief]

<sup>16</sup> See Council Directive 92/100/EEC of 19 November 1992 on rental right and lending right and on certain rights related to copyright in the field of intellectual property (O.J.1992 L 346/61) [Hereinafter, *EC Rental Directive*, in brief]

<sup>17</sup> See Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases (O.J. 1996 L 077/20).

<sup>18</sup> See Section 107 of the *United States Copyright Act 1976*.

<sup>19</sup> See Section 185 of the *Philippine Intellectual Property Code 1997*.

<sup>20</sup> See Lionel Bently and Brad Sherman, *Intellectual Property Law*, New York: Oxford University Press Inc., 4<sup>th</sup> ed. (2003) at 194. [Hereinafter, *Bently, Intellectual Property Law*, in brief]

<sup>21</sup> See Article L112-5 of *Code de la propriété intellectuelle* which states that, “Once a work has been published, the author cannot prevent:

1. Private family performances.
2. Copies for the private and personal use of the copier. This provision does not apply to works of art, computer programs (where a single safeguard copy is allowed, Art. L122-6-1-II) and databases.
3. In cases where the name of the author and the source are clearly indicated,
  - a) Analyses and short citations justified by the critical, polemical, scientific or pedagogical nature of the work.
  - b) Press reviews.
  - c) Diffusion of public speeches as current news.
  - d) Reproductions of works of art in catalogues for auctions in France (subject to regulatory restrictions).
4. Parody, pastiche and caricature, "taking into account the usage of the genre".
5. Acts necessary to access a database within the limits of the agreed use.

dealing approach is a middle ground way to fair use doctrine. Each approach has its advantages and drawbacks in legal practice.

Conflict within fair use doctrine has always existed, leading to the current dilemma of interpreting copyright's fair use for copyright practitioners, scholars and judges. We analyse here the position of fair use doctrine in copyright law mainly through examining the architecture of fair use legislation and policies in the United States, the United Kingdom, the European Union and other international conventions.

Accordingly, this chapter includes:

1. The history and evolution of fair use in copyright law as an important doctrine towards protecting social benefits and public interests.
2. The justification of fair use doctrine, emphasising that an essential of fair use is to keep a balance between rightsholders' benefits and public interests.
3. Policy issues which arose in constructing general legal systems for fair use, by examining the disharmony on adopting fair use doctrine. In other words, we will explore the conflict between the "ought" fair use ("shall") and "is" fair use ("may") issues. The "three-step test" of fair use provided in the Berne Convention will also be examined.
4. The three legal regimes in practicing fair use — *the open-ended approach*, which is applied in the U.S. and the Philippines; *the restricted approach*, as embodied in almost all civil law countries; as well as *the fair dealing doctrine* adopted in most common law legislations such as is found in the U.K— will also be discussed.
5. Through analysing the conflicts existing in current fair use policies and legal practice, the flexibility and uncertainty of current fair use legal system will be highlighted. We will end in asking if it is possible, and how, to realise fair use in the context of digital file sharing.

## 2.1 Granting Exceptions to Exclusive Rights: History of Fair Use

### Doctrine

As a “basic limitation on the rightsholders’ right to control copying of their work”,<sup>22</sup> fair use doctrine emerged early in the history of modern copyright law. The first copyright statute, the Statute of Anne<sup>23</sup>, appeared in Britain in 1709, granting the author for a limited duration a temporary monopoly right to control copying of their works and gaining economic returns. The economic principles embodied in the Anne Statute became the foundation for modern copyright law.<sup>24</sup> However, in order to achieve a balance between the incentive to creation and restriction on knowledge dissemination, a “tradeoff”<sup>25</sup> was sought to prevent authors’ exclusive rights from over-expanding. Fair use doctrine emerged from tradeoff.

Fair use doctrine was initially rooted in early English cases, where the defence was known as “fair abridgment”. *Gyles v. Wilcox*<sup>26</sup> was one of the earliest cases where this concept was a significant factor. Lord Chancellor Hardwicke addressed the defence of abridgment that “Where books are colorable shortened only, they are undoubtedly within the meaning of the [copyright act], and are mere evasions of the statute, and cannot be called an abridgment.... But this must not be carried so far as to restrain persons from making a real and fair abridgment; for abridgments may, with great propriety, be called a new book, because not only the paper and print, but the invention, learning, and judgment of the author is shown in them, and in many

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<sup>22</sup> See Robin D. Gross, “Understanding Your Rights: the Public’s Rights of Fair use”, available at <http://www.eff.org/cafe/gross1.html>. (In his articles, Robin advocates fair use rights in digital media, by stating that “[fair use] tries to balance the interests---the competing legitimate interests---between the copyrightsholder and the public, which needs to have access to information to be able to share ideas. The copyright law does not give total control to the copyrightsholder over what they choose to allow or permit. There is an intentional breathing space.”)

<sup>23</sup> The Statute of Anne (short title Copyright Act 1709 8 Anne c.19) was the first British copyright law, enacted in 1709 and entering into force on April 10, 1710. It is generally considered to be the first fully-fledged copyright law. See, Eaton S. Drone, *A Treatise on the Law of Property in Intellectual Productions*, Little Brown Co. (1879).

<sup>24</sup> See, Elliot Aaret, “Access Denied: The Limits of Fair Use”, *Journal of Washington D.C. Bar for Lawyer* (2003). See also, Dietrich A. Loeber, “‘Socialist’ Features of Soviet Copyright Law”, *Columbia Journal of Transnational Law*, Vol. 23 (1984) at 297-313. Joseph Lowenstein, *The Author’s Due: Printing and the Prehistory of Copyright*, University of Chicago Press (2002).

<sup>25</sup> Christopher Sprigman, “The Mouse That Ate the Public Domain: Disney, the Copyright Term Extension Act and Eldred v. Ashcroft” (2002) available at: [http://writ.news.findlaw.com/commentary/20020305\\_sprigman.html](http://writ.news.findlaw.com/commentary/20020305_sprigman.html).

<sup>26</sup> *Gyles v. Wilcox*, 2 Atk. 141 (1740) (No. 130).

cases are extremely useful, though in some instances prejudicial, by mistaking and curtailing the sense of an author.”<sup>27</sup> The decision granted that the use of a copyright protected work would be original only if organised in a creative and inventive way wherein it could promote learning rather than exploitation of the original work. Other early English cases also embodied the earliest fair use doctrine, for example, in *Dodsley v. Kinnersley*<sup>28</sup> the market factor was taken into account for the first time, and also for the first time, the amount of the work taken by a second author was discussed. A more significant case is *Cary v. Kersley*<sup>29</sup>, which moved the term “fair abridgment” to the conceptual in a more applicable modern sense “fair use”. In *Cary*, the plaintiff composed an itinerary “*The Book of Roads*”, while the defendant published a similar work which included some information bearing a strong resemblance to the plaintiff’s work, such as the names of certain places. Lord Ellenborough decided, “[T]hat part of the work of one author is found in another, is not of itself piracy, or sufficient to support an action; a man may fairly adopt part of the work of another: he may so make use of another’s labors for the promotion of science, and the benefit of the public. ... but having done so, the question will be, [w]as the matter so taken used fairly with that view”.<sup>30</sup> The word “fair use” is a derivative of “*used fairly*”.

The U.S. 1841 case *Folsom v. Marsh*<sup>31</sup> is generally considered to be the foundation of the modern term of fair use in the U.S., in which the court considered whether it was a copyright infringement when the Reverend Charles W. Upham used President Washington’s letters in his book. Justice Story rejected the fair use defence for the following reasons, “reviewer[s] may fairly cite largely from the original work, if his design be really and truly to use the passages for the purposes of fair and reasonable criticism. On the other hand, it is as clear, that if he thus cites the most important parts of the work, with a view, not to criticize, but to supersede the use of the

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<sup>27</sup> Ibid.

<sup>28</sup> *Dodsley v. Kinnersley*, 27 Eng. Rep. 270, 271 (cn. 1761). In this case, plaintiffs as assignees of Samuel Johnson published a two volume work of Johnson’s fiction, while defendant printed one-tenth of the work in the Grand Magazine of Magazines. The court decided that the copying activity of defendant was a fair abridgment for one thing, only one-tenth of the plaintiffs’ work was taken by the defendant, which was appropriate. For the other thing, the plaintiffs had already published the volume so that the market of plaintiffs would not be influenced by defendant’s act.

<sup>29</sup> *Cary v. Kearsley*, 107 Eng. Rep. 679, 681-682 (1802) 4 Esp, 168, 170.

<sup>30</sup> Ibid.

<sup>31</sup> See *Folsom v. Marsh*, supra note 3.

original work, and substitute the review for it, such a use will be deemed in law a piracy”.<sup>32</sup> The multifactor test was suggested the first time by Justice Story, which was stated as the court “must often, ... look to the nature and objects of the selections made, the quantity and value of the materials used, and the degree in which the use may prejudice the sale, or diminish the profits, or supersede the objects, of the original work”<sup>33</sup>. Since then, Justice Story’s language has been quoted and used to explain fair use cases for over 150 years until the same factors for determining “fair use” were codified in amendments to the U.S. Copyright Act of 1976<sup>34</sup>.

Current U.S. Copyright law contains the four factors that courts use most often in determining fair use. Congress intended that the factors to be considered in every case, so that Section 107 of the U.S. Copyright Act states that “ in determining whether the use made of a work in any particular case is a fair use the factors to be considered *shall* include ...”. However, ‘judge-made’ law conventionality has also been applied in fair use doctrine practice. As stated in *Sony* case, “the courts must be free to adopt the doctrine to particular situations on a case by case basis”.<sup>35</sup> Thus, to decide a particular case, the court may consider other factors in addition to the four principle factors listed in Section 107. Additionally, the United States Constitution also defines the fair use doctrine as the promotion of “the Progress of Science and useful Arts”<sup>36</sup>. In the long history of coexistence of copyright and Constitutional rights, there has always been the potential for conflicts.

International conventions and regional directives have also impacted on the evolution of fair use doctrine. For instance, the famous “three-step test” for fair use was addressed in the Berne Convention<sup>37</sup>, which has been used in TRIPs<sup>38</sup>, and Rome Convention<sup>39</sup>, as well as a series of

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<sup>32</sup> Ibid. at 342.

<sup>33</sup> Ibid.

<sup>34</sup> See Section 107 of the United States Copyright Act, 1976.

<sup>35</sup> See, *Sony Corporation of America, et al., Petitioners v Universal City Studios, Inc., etc., et al.* 464 US 417, 78 L Ed 2d 574, 104 S Ct 774, reh den (US) 80 L Ed 2d 148, 104 S Ct 1619 [No. 81-1687]. [Hereinafter, *Sony*, in brief].

<sup>36</sup> See the United States Constitution, Part I.1.8.

<sup>37</sup> See Berne Convention for the Protection of Literary and Artistic Works 1886 (1971 revision with 1979 amendments). Article 9 (2) states, “it shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author”.

EC Directives, such as the EC Information Society Directive<sup>40</sup>, the EC Rental Directive<sup>41</sup>, and so on. EC Directives, such as EC Information Society Directive, also influence fair use legislation and practice within member states. For example, the UK CDPA 1988<sup>42</sup> limits its fair use acts to three categories, i.e., fair dealing for the purposes of research and private study (Section 29), fair dealing for the purposes of criticism or review (Section 30 (1)), and fair dealing for the purposes of reporting current events (Section 30 (2)), as in the “exhaustive enumeration” requirement of the EC Information Directive.

Worldwide legislation and policy of fair use doctrine is beset by a lack of harmonisation, which results in diversity in the justification and practice of fair use doctrine. In the following subpart, the issue of justifying fair use doctrine specifically applicable to the file sharing environment will be subjected to an evaluation.

## 2.2 Justifications for Fair Use in File Sharing

Considering that fair use doctrine has the potential to inhibit rightsholders’ control on copyright works, it is appropriate to revisit its legitimacy. The issue of whether and why fair use is desirable is of importance to us all. Fair use has had an eventful history as one of the most contested and troublesome doctrines in copyright law. In response to critics, at least four basic schools of thoughts have been used to explain the essentials of fair use doctrine.

Firstly, there are those who assert that fair use represents “a copyright owners’ implied or tacit consent”<sup>43</sup>. According to this premise, fair use defence can be “conceived as based on authors’ implied consent to reasonable uses of their works”.<sup>44</sup> As exemplified in a large number of

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<sup>38</sup> See *TRIPs*, supra note 14.

<sup>39</sup> See Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organisations (1961).

<sup>40</sup> See EC Information Directive, supra note 15.

<sup>41</sup> See EC Rental Directive, supra note 16.

<sup>42</sup> See UK Copyright, Design and Patent Act (CDPA) 1988.

<sup>43</sup> See Tom W. Bell, “Fair Use vs. Fared Use: The Impact of Automated Rights Management on Copyright’s Fair Use Doctrine”, *Northern Carolina Law Review*, Vol. 76 (1998) at 557. See also, Melville B. Nimmer and David Nimmer, *Nimmer on Copyright*, Section 13.05, New York: Matthew Bender Publisher (1997) at 13-151.

<sup>44</sup> See *Harper & Row v. Nation Enterprises*, 471 U.S. (1985) at 549-50, 105 S.Ct. at 2224-25.



copyright lawsuits, however, this argument falls down because in practice copyright owners rarely if ever intend to share their labour without permission, even if for the purposes of research and/or education.<sup>45</sup> Richard Adelstain describes that, “linking fair use to the copyright owners’ consent, implied or otherwise, to the infringement is a serious and unwarranted departure from well-settled notions of private property”<sup>46</sup>. It is “manifestly a fiction”<sup>47</sup> that rightsholders would like to “license critical reviews or lampoons of their own products”<sup>48</sup>.

Secondly, some authors claim that certain statutory factors, such as the four particular conditions of fair use listed in Section 107 of U.S. Copyright Act, are the requisites of fair use. Judge Leval, for example, states that fair use is a determination of considering the four statutory factors.<sup>49</sup> Weinreb starts from the premise that “copyright is property and that ordinarily the copyright owner’s reasons for withholding permission to copy need not conform to any public purpose”<sup>50</sup>, asserting that “a standard of fairness”<sup>51</sup> which is based on “the exercise of great judicial skill [,] or art”<sup>52</sup> is the essence of fair use. Of particular note, although fair use is a legal defence being adopted within copyright lawsuits, it is in theory far beyond a statutory defence. Analogising from Lessig’s theory, factors “[Law, social norms, market and the code] are distinct, yet they are plainly interdependent. Each can support or oppose the others.... Some constraints make others possible; others make some impossible. Constraints work together, though they function differently and the effect of each is distinct. Norms constrain through the stigma that a community imposes; markets constrain through the price that they exact; architectures constrain through the physical burdens they impose; and law constrains through the punishment it

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<sup>45</sup> In legal practice, not all the rightsholders agree making use of their copyright works without permission. See e.g., *Basic Books, Inc. v. Kinko’s Graphics Corp.*, 758 F. Supp. 1522 (S.D.N.Y. 1991) (In *Kinko*, rightsholders sued *Kinko* for illegally making copies of their works, although the copies were offered to students for their research and study purposes). See also, *Sweezy v. New Hampshire*, 354 U.S. 234, 250 (1957). (In this case, the Justice held that academic freedom is an essential issue in copyright area).

<sup>46</sup> See Richard P. Adelstein and Steven I. Peretz, “The Competition of Technologies in Markets for Ideas: Copyright and Fair Use in Evolutionary Perspective”, *International Review of Law and Economics*, Vol. 5 (1985) at 228.

<sup>47</sup> See Nimmer, *Nimmer on Copyright*, supra note 43, at 151.

<sup>48</sup> See *Campbell, aka Skywalker, et.al. v. Acuff-Rose Music, Inc.*, 510 U.S. Supreme Court (1994) 569, 592.

<sup>49</sup> Pierre N. Leval, “Toward a Fair Use Standard”, *Harvard Law Review*, Vol.103 (1990) at 1105-1110.

<sup>50</sup> Lloyd L. Weinreb, “Fair’s Fair”, *Harvard Law Review*, Vol. 103(5) (1990) at 1160-1161.

<sup>51</sup> *Ibid.* at 1161.

<sup>52</sup> *Ibid.*

threatens.”<sup>53</sup> Lessig’s theory seeks to demonstrate that the four factors —law, social norms, architecture and markets— work together to constrain society. Each of the constraints plays an equal influence, and each of them is also relevant to others. At one time the law might be more influential, but the other factors should not be neglected. Thus, fair use as a legal doctrine originates from a wider social, economic and technical background, rather than simply being a simply statutory regulation. In other words, when considering the essential of fair use doctrine, we should examine fundamentals and justifications beyond “the exercise of great judicial skill [,] or art”<sup>54</sup>.

As more broadly accepted justifications, another two theories justifying fair use doctrine, i.e., the market failure theory and the public interest justification, deserve particular attention. Borrowing Weinreb’s social value theory,<sup>55</sup> I prefer to revisit “fairness” from a macroscopic perspective, considering the *controls of the balance* between the public interest and rightsholders’ private benefits.

### ***2.2.1. For Rightsholders’ Interests: Market Failure Justification for Fair Use***

For almost twenty years, a market-based analysis of copyright’s limitations and exceptions, which justifies fair use given copyright’s underlying economic rationale<sup>56</sup>, has become pre-eminent regarding fair use doctrine. The theory is based on the premise that no matter which approach to practising fair use is used, the basic principle is that the use is not intended to trade off copyright owners’ commercial interests for social reasons. As Douglas Bennett remarks, any use is not supposed to “significantly undercut what the creator or publisher might gain from commercial sale of the work”.<sup>57</sup>

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<sup>53</sup> Lawrence Lessig, *Code and Other Laws of Cyberspace*, New York: Basic Books Publishers, 1<sup>st</sup> ed. (1999) at 85-99.

<sup>54</sup> See Lloyd L. Weinreb, *Fair’s Fair*, supra note 50.

<sup>55</sup> See Lloyd L. Weinreb, *Fair’s Fair*, supra note 50, at 1137-1161.

<sup>56</sup> See Raymond Shih Ray Ku, “Consumers and Creative Destruction: Fair Use Beyond Market Failure”, *Berkeley Technology Law Journal*, Vol.2 (2003) at 18. See also, Wendy Gordon, *Fair Use as Market Failure*, supra note 6.

<sup>57</sup> See Douglas Bennett, “Fair Use in Digital Environments: The Work of the Conference on Fair Use (CONFU)”, *National Federation of Abstracting and Information Services*, Philadelphia (1996) Available at, <http://www.arl.org/newsltr/186/fairuse.html>.

### 2.2.1.1. Summary of Market Failure Theory

Empirical evidence bases market failure justification to copyright exceptions resting on the theory that fair use doctrine stems from a legal response to market failure. That is, fair use emerges where a positive economic use would not occur for any reason.<sup>58</sup>

According to those advocating market failure theory, there are two instances where market failure can be related to fair use doctrine. Firstly, the enactment of copyright laws and regulations results from market failure, exemplified by the issues pertaining to authors and free riders. In economic terms, copyright law arises as a response to a variant of market failure which originates from the “public goods”<sup>59</sup> characteristics of copyright content<sup>60</sup>. Given the fact that “creating a work can cost authors a good deal, whereas copying a work costs free riders<sup>61</sup> very little”<sup>62</sup>, lack of protection to copyright works may reduce the authors’ incentive to produce, which in turn leads to fewer resources being created in the public interest than their social merit

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<sup>58</sup> See Tom Bell, *Fair Use v. Fared Use*, supra note 43, at 581-584.

<sup>59</sup> The term “public goods” is frequently used in the language of economics to mean non-excludable and non-rivalrous characteristics in the consumption of the good. It is linked to two features in accessing and consuming the good. Firstly, a public good can be supplied to multiple parties without diminishing or limiting the utility available to other users; namely, public goods exhibit non-rivalness. For example, if someone eats an apple, there will be no apple left for others; but breathing in air does not significantly prevent others from inhaling fresh air at the same time. Secondly, once a public good is produced, it is impossible to exclude any individual from using it. It therefore follows that public goods are non-excludable. A prominent example is the free-rider problem inherently within the public goods, which means consumers can take advantage of the good without paying for it. See, Kezar, Anthony C. Chamber and John C. Burkhardt, *Higher Education for the Public Good: Emerging Voices form a National Movement*, Jossey-Bass Publishers, 1<sup>st</sup> ed. (2005). See also, Harold Demsetz, “The Private Production of Public Goods”, *Journal of Law and Economics*, Vol. 13 (1970) at 293-306. See, Richard A. Posner, *Economics Analysis of Law*, 2<sup>nd</sup> ed. (1977) at 11-12. See also, Markovitz, The Causes and Policy Significance of Pareto Resource Misallocation: A Checklist for Micro-Economics Policy Analysis”, *Stanford Law Review*, Vol. 28 (1975) at 1.

<sup>60</sup> See Gordon, “Fair Use as Market Failure”, supra note 6, at 1610. The basis of copyright is closely related to these two features of public goods. Once a copyrighted work is created and disseminated in public, the content in the work such as words or digital data can be used by anyone without affecting others’ access to the work. There are many economic disputes on how the public good theory is embodied in intellectual property law. See also, e.g., William M. Landes and Richard A. Posner, “An Economic Analysis of Copyright Law”, *Journal of Legal Studies*, Vol. xviii (1989) at 325. See also, Hall R. Varian, “Market for Information Goods” (1998) available at, <http://www.sims.berkeley.edu/~hal/Papers/japan/>.

<sup>61</sup> “Free rider” is an important market failure resulted from the public goods theory. It refers to “actors who consume more than their fair share of a resource, or shoulder less than a fair share of the costs of its production”. See George Bailey, “Free Riders, Givers, and Heavy Users: Predicting listener support for public radio”, *Journal of Broadcasting and Electronic Media*, Broadcast Education Association (2004).

<sup>62</sup> See Weinreb, supra note 50.

would otherwise warrant<sup>63</sup>. As a response to market failure, copyright laws and regulations have been enacted to “restrain the spontaneity of men where but for it there would be nothing of any kind to hinder their doing as they saw fit”<sup>64</sup>. Hence copyright may be seen to temper the inertial effect of market failure, whereby creative endeavours may otherwise not occur in the sphere of public interest and greater good.

Second, the market failure caused by unconstrained copyright presupposes a need for fair use. Over-expansion of copyright would lead to copyright owners monopolising the market. Should monopoly occur, many socially beneficial uses of copyright works will not take place. In order to prevent this consequence of market failure, fair use may be imposed whenever the “social value ... outweighs any detriment to the artist”<sup>65</sup> to balance the copyright owners’ right and the social benefit.<sup>66</sup> As Gordon suggests, fair use will “permit uncompensated transfers that are socially desirable but not capable of effectuation through the market”<sup>67</sup>.

This market failure approach has influenced current academic discourse. Tom Bell argues that fair use should have a reduced scope given that DRM “radically reduce[s] the transaction costs of licensing access to copyright works” as a response to market failure<sup>68</sup>. Trotter Hardy posits that “a private property copyright regime” would be the best rule in cyberspace because transaction cost in cyberspace “appears to be falling quite rapidly”.<sup>69</sup> Market failure approach has also had repercussions for copyright policy. For instance, the Digital Millennium Copyright Act (DMCA) remarks that it is illegal to circumvent DRM technologies even if the circumvention is for the purpose of making fair use of copyright works.<sup>70</sup> Moreover, the market failure justification of fair use doctrine has also been embodied in legal practice. The courts

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<sup>63</sup> See Gordon, *Fair Use as Market Failure*, supra note 6, at 1610. See also, Stephen Breyer, “Copyright: A Rejoinder”, *U.C.L.A. Law Review*, Vol.20 (1972) at 75. See also, Hurt and Schuchman, “The Economic Rationale of Copyright”, *American Economics Review*, Vol.56 (1966) at 421.

<sup>64</sup> See *White-Smith Music Public Co. v. Apollo Co.*, 209 U.S. 1, 19 (1908).

<sup>65</sup> See Henry Marsh, “Betamax and Fair Use: A Shotgun Marriage”, *Santa Clara Law Review*, Vol. 21(49) (1981) at 58.

<sup>66</sup> See Gordon, *Fair Use as Market Failure*, supra note 6, at 1615.

<sup>67</sup> See Gordon, *Fair Use as Market Failure*, supra note 6, at 1601.

<sup>68</sup> See Tom Bell, *Fair Use v. Fared Use*, supra note 43, at 581-584.

<sup>69</sup> See Trotter Hardy, “Property in Cyberspace”, *University of Chicago Legal Review* (1996) at 259-260.

<sup>70</sup> See 17 U.S. Copyright Act, Section 1201-1205 (2000).

have imported economic elements into significant fair use decisions. For example, in *Computer Association International v. Altai, Inc.*,<sup>71</sup> the Court cited and drew reasoning from several economically-oriented articles on copyright protection for software.<sup>72</sup> In *Cambell v. Acuff-Rose Music, Inc.*,<sup>73</sup> the Court employed market failure theory to establish that a parody was a fair use because it would not replace the original in the market. Of note is that market failure theory has penetrated research and educational areas. For instance, in *Texaco*,<sup>74</sup> Texaco's unauthorised photocopying of copyrighted articles from scientific journals for their research staff was found not to constitute fair use, granting the loss of rightsholders' market interest caused by such copyright behaviour. In *Princeton University Press v. Michigan Document Services, Inc.*,<sup>75</sup> the Courts dismissed the fair use claim of a copy shop selling course packs assigned by University of Michigan professors, based on the market loss of rightsholders.

#### **2.2.1.2. Questioning Market Failure Approach in File Sharing Practice**

In defining fair use doctrine, the justification for the market failure approach suffers much from its economic basis and origin. In a 1982 paper entitled "*Fair Use as Market Failure: A Structural and Economic Analysis of the 'Betamax' Case and Its Predecessors*", Gordon is highly recommendatory of the "three-part test" for determining fair use doctrine.<sup>76</sup> Gordon asserts that fair use be awarded to the defendant who is sued for copyright infringement when "(1) market failure is present; (2) transfer of the use to defendant is socially desirable; and (3) an award of fair use would not cause substantial injury to the incentives of the plaintiff copyright owner".<sup>77</sup> In other words, the first element of the test ensures that no fair use exception should be applied without a good cause, i.e., market failure; the second element requires that the fair use behaviour is supposed to have valuable social effects; the third warrants that a use of copyright

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<sup>71</sup> See *Computer Association International v. Altai, Inc.*, 982 F. 2d 693 (2d Cir. 1992).

<sup>72</sup> Ibid. See also, Maureen Ryan, "Fair Use and Academic Expression: Rhetoric, Reality, and Restriction on Academic Freedom", *Cornell Journal of Law and Public Policy*, Issue 8 (1998-1999) at 541-590.

<sup>73</sup> See *Cambell v. Acuff-Rose Music*, supra note 48.

<sup>74</sup> See *American Geophysical Union v. Texaco Inc.*, 60 F. 3d 913, 35 U.S.Q., 2d (BNA) 1513 (2d Cir. 1994) cert. Dismissed, 116 S. Ct. 592 (1995). [Hereinafter, *Texaco*, in brief].

<sup>75</sup> See *Princeton University Press v. Michigan Document Services, Inc.*, 99 F. 3d 1381 (6<sup>th</sup> Cir. 1996) cert. Denied, 117 S. Ct. 1336 (1997).

<sup>76</sup> See Gordon, supra note 6, at 1614.

<sup>77</sup> Ibid., at 1614.

works cannot be awarded as fair use if the use hurts the “incentive-creating” purpose of the copyright law.<sup>78</sup> Analysing the drawbacks of Gordon’s “three-step” test in justifying fair use doctrine demonstrates that the rightsholders’ benefit is “neither the only kind of problem to which fair use responds nor the only kind of problem to which fair use should respond”<sup>79</sup>.

First of all, market failure theory may not take full account of the presence of social benefits which are supposed to be achieved by application of fair use doctrine. In the article “*Redefining The Market Failure Approach to Fair Use In An Era of Copyright Permission Systems*”, Loren argues that the public interest, as the source of Congress’ power to enact copyright, is pre-eminent in fair use doctrine. The view that fair use exists where “there is not an efficient market for remuneration to the copyright owner”<sup>80</sup> neglects that “copyright law is vested with a public interest”.<sup>81</sup> The limits of the market based approach is also argued by Francesco Parisi as “an exogenous reduction of transaction costs would limit the scope and application of the defence of fair use” if indeed fair use doctrine is regarded as being based on transaction costs<sup>82</sup>. Recognising social benefits as a fundamental purpose of fair use is important because it is more consistent with the essential of copyright law and it represents a crucial competing concept to market failure.

Second, the market failure approach to fair use has significantly narrowed its application in the context of file sharing. The first precondition for fair use in file sharing practice, i.e., “market failure must be present”, has been challenged. According to Gordon and Bell,<sup>83</sup> the social benefits stemming from the use of copyright works do not necessarily compel it to be within a fair use. If a sufficient market for a transfer could be built up, or the parties could reach an agreement for the transfer, there would be no place for fair use doctrine. For instance, even though it serves the social value of education and research, the conduct of a lecturer making

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<sup>78</sup> Ibid.

<sup>79</sup> See Neil Netanel, “Copyright and a Democratic Civil Society”, *Yale Law Review*, Vol.106 (283) (1996) at 330-331. See also, Gordon, *supra* note 6, at 1034.

<sup>80</sup> See Lydis Pallas Loren, “Redefining The Market Failure Approach to Fair Use In An Era of Copyright Permission Systems”, *Journal of Intellectual Property Law*, Vol. 5(1) (1997) at 48.

<sup>81</sup> Ibid.

<sup>82</sup> See Ben Depoorter and Francesco Parisi, “Fair Use and Copyright Protection: A Price Theory Explanation”, *International Review of Law and Economics*, Vol.21 (2002) at 453.

<sup>83</sup> See Gordon, *supra* note 6. See also, Tom Bell, *supra* note 43.

course-packs for his students cannot be deemed as a fair use, on the ground that there is a possibility that he or his students will be able to raise sufficient funds to purchase permission from copyright owners, and a way exists for collecting such financial compensation via collecting agencies.<sup>84</sup> As phrased in explanation of this, “only where the desired transfer of resource use is unlikely to take place spontaneously, or where special circumstances such as market flaws impair the market’s ordinary ability to serve as a measure of how resources should be allocated, is there an economic need for allowing non-consensual transfer”.<sup>85</sup> However, the rightsholders’ lack of reluctance towards licence making use of all copyright works indicates that market failure does not always exist in file sharing practice. For example, in both *Napster* and *MP3.com*, the courts concluded that the use of copyright works was not fair on the ground that the use “harms the rightsholders’ attempts to charge for the same downloads”.<sup>86</sup> Thus, the absence of market failure in file sharing practice “weighed heavily against fair use doctrine”.<sup>87</sup>

Conversely, the special characteristics of file sharing technology increase the possibility of harm to the copyright owners’ incentives, which is against the third element of the test. The substantial injury hurdle element lies at the heart of the balance between social benefits gained from the fair use behaviour and the potential harm to authors’ incentives. Gordon suggests that, “[f]air use should be denied whenever a substantial injury appears that will impair incentives”.<sup>88</sup> Legal practice up to present, however, is much more complicated than Gordon describes. Under complete market failure<sup>89</sup> circumstances fair use should be allowed on the grounds that “no incentive purpose would be served by giving plaintiff protection, ... and no disincentive would

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<sup>84</sup> “Collecting agencies”, also known as collecting societies, refer to organisations that administer the rights for the benefits of authors and/or copyright owners by authorising various specified uses of their members’ works. See Bently and Sherman, *supra* note 18, at 268.

<sup>85</sup> *Ibid.*, at 1615.

<sup>86</sup> See *Napster*, *supra* note 12, at 1017.

<sup>87</sup> See Raymond Shih Ray Ku, *supra* note 6.

<sup>88</sup> See Gordon, *supra* note 6, at 1618.

<sup>89</sup> Gordon divides market failure into two parts: “complete market failure”, and “intermediate market failure”. The former refers to the situation that no transaction will happen at all because of high transaction costs, i.e., neither the copyright owner nor the potential user can benefit from copyright enforcement, even if fair use was not allowed. The latter means in some cases, the market cannot be relied on for all desirable transactions, but rather some of the exchanges would possibly take place. For instance, giving fair use to those who download articles in a book from file sharing networks would generate free riders; however, those who download copyrighted content from academic file sharing networks for research or teaching purposes may deserve the protection of fair use doctrine. See Gordon, *supra* note 6, at 1618.

be created by allowing defendant fair use”.<sup>90</sup> It is to say that, in complete market failure cases, fair use should be awarded only if the first two elements of the test were satisfied, i.e., a market failure is present, as well as social value of the use is justified. In contrast, in instances of intermediate market failure<sup>91</sup>, both allowing and denying fair use have shortcomings. For example, allowing fair use to those who download articles from file sharing networks would generate free riders; however, downloading copyrighted content from academic file sharing networks for research or teaching purposes perhaps deserves the protection of fair use doctrine. To solve this conflict, the negative effect of the use should be considered carefully when allowing a fair use defence. In other words, fair use should not be awarded if the behaviour harms the authors’ incentives for creation. However, given the special characteristics<sup>92</sup> of file sharing technology, harm to authors’ incentives to creation is more likely to happen than within traditional copyright environment. For example, a lecturer who makes use of an article in a published book for his instantaneous classroom teaching, such as copying the article in course notes or making use of the article in PowerPoint, would fall within the fair use defence, despite the possibility that the student may not then need to buy the book to obtain the article. The justification of scale lies in the rationale that the impact of the use does not substantially harm the copyright owner’s incentive to create, based on the fact that the number of potential free-riders in the case, namely, those who attend the lecture without intention of purchasing the book, is too small, compared to millions of free-riders in file sharing networks, to harm the owner’s market. Comparatively, if the lecturer uploads the article to an academic file sharing network, the dramatically enhanced information sharing speed by the Internet technology<sup>93</sup> may disseminate the article to thousands of people, whether it is for research or study purposes. The copyright owner’s monetary interests would be damaged if a large number of these people

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<sup>90</sup> See Gordon, *supra* note 6, at 1618.

<sup>91</sup> See Chrisophe Geiger, “Copyright and Free Access to Information: for a fair use of interests in a globalised world”, *E.I.P.R.*, Vol. 28(7) (2006) at 366-373. See also, Gillian Davis, “Copyright and the Public Interest”, *Model Legal Studies*, Sweet and Maxwell, 2<sup>nd</sup> ed. (2002). See also, Pamela Samuelson, “Economic and Constitutional Influences on Copyright Law in the United States”, *E.I.P.R.*, Vol.263 (2001) at 409.

<sup>92</sup> See e.g., the data flow form of information exchange in file sharing networks makes resource swap faster, more convenient, and involves more participators.

<sup>93</sup> See, e.g., in *Napster*, the Ninth Circuit Court provided the figures that in 1999 approximately 10,000 music files were “shared” per second using Napster and more than 100 users attempted to log onto the Napster server every second. Napster’s popularity reached the level of 75 million users by the end of 2000. See *Napster*, *supra* note 12.



became free-riders<sup>94</sup>, which in turn could arguably be held to harm authors' incentives for creation. Thus, file sharing technology highlights difficulties in detecting the real purpose and character behind the use of the copyrighted work, and in consequence increases the possibility of harm to copyright owners' incentives. According to Gordon's test, this substantial harm to copyright owners' incentives may lead to failure in applying fair use doctrine.

Thirdly, market failure theory does not distinguish between the author's incentives and those of the distributor. Copyright is designed to protect both the author and the distributor. The artist's incentives to create, however, have been overshadowed by the incentives of the distributor in legal practice. Recent research shows that the overwhelming majority of artists are included under the term "multiple job-holders"<sup>95</sup>, creating new works for both pecuniary and non-pecuniary reasons. Most of them earn their living by means other than royalties from the sale of music.<sup>96</sup> In some cases, "unrestricted consumer copying may have a marginally negative or even a positive impact upon an artist's financial incentives to create"<sup>97</sup>. For example, Franz Ferdinand musician Alex Kapranos claimed, rather than hindering their progress, that sharing their works on P2P networks was adopted to "help [them] as a band in getting established"<sup>98</sup>. Their experience indicated that allowing use of copyright works is not necessarily directly connected or proportional to reducing authors' incentives to create. This is especially relevant in file sharing practice given that in P2P environment, the distributor is largely unnecessary. According to Gordon's work, market failure occurs "if the creators of intellectual productions were given no rights to control the use made of their works, [such that] they ... would lack an appropriate level of incentive to create, ... [likewise] fewer resources would be devoted to intellectual productions than their social merit would warrant"<sup>99</sup>. If the author's incentives to

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<sup>94</sup> See, e.g., An investigation by Department of Economics of Pennsylvania University shows that downloading reduced purchases by individuals by about 9 percent. See, Rafael Rob and Joel Waldfogel, "Piracy on the High C's: Music Downloading, Sales Displacement, and Social Welfare in a Sample of College Students" (2004) available at, [http://pages.stern.nyu.edu/~lcabral/ioday/Piracy\\_March082005.pdf](http://pages.stern.nyu.edu/~lcabral/ioday/Piracy_March082005.pdf).

<sup>95</sup> See Ruth Towse, "Copyright and Creativity in the Cultural Industries" (2001) available at, [www.unesco.org/culture/development](http://www.unesco.org/culture/development).

<sup>96</sup> Ibid. 161

<sup>97</sup> See Ryan, *supra* note 72, at 28.

<sup>98</sup> See "Franz Ferdinand Star Lectures on File Sharing", available at, <http://www.nme.com/news/108349.htm>.

<sup>99</sup> See Gordon, *Fair Use*, *supra* note 6, at 1610-1611.

create were not adversely influenced by the consumer's copying, the premise of Gordon's test would collapse.

Thus, the market failure theory originated from economic basis and consideration can not sufficiently justify fair use doctrine in the context of file sharing.

### ***2.2.2. For Social Benefits: The Public Interest Justification for Fair Use***

As previously indicated, fair use is a socially beneficial and culturally significant copyright exception. The public interest in fair use has justified the inclusion of the defence in a number of legislations. For example, Section 171(3) of the CDPA affirms that by stating; "[N]othing in this Part affects any rule of law preventing or restricting the enforcement of copyright, on grounds of public interest or otherwise".<sup>100</sup> Section 225 (3) of the New Zealand Copyright Act 1994 is virtually identical to S.171 (3) by stating that " [N]othing in this Act affects any rule of law preventing or restricting the enforcement of copyright, on grounds of public interest or otherwise".<sup>101</sup> Case law has also emphasised the importance of public interest justification when applying fair use doctrine. For instance, in *Fogerty v. Fantasy, Inc.*,<sup>102</sup> the Court granted that "[C]opyright law ultimately serves the purpose of enriching the general public through access to creative works". In *Mazer v. Stein*,<sup>103</sup> the Court decided that "The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in 'Science and useful Arts'." This principle has also achieved judicial approval in other countries, such as Canada<sup>104</sup> and Australia<sup>105</sup>.

Fair use doctrine is of special value in encouraging information transfer and promoting social

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<sup>100</sup> See Copyright, Design and Patent Act (1988), Sec. 171(3).

<sup>101</sup> See Section 225 (3) of the New Zealand Copyright Act 1994.

<sup>102</sup> See *Fogerty v. Fantasy, Inc.*, 510 U.S. 517,527 (1994)

<sup>103</sup> See *Mazer v. Stein*, 347 U.S. 201, 219 (1954).

<sup>104</sup> See e.g., *Queen v. James Lorimer & Co.* (1984) 77 C.P.R. 2d 262.

<sup>105</sup> See e.g., *The Commonwealth of Australia v. John Fairfax and Sons* A.L.J.R. Vol. 55 (1981) at 45, but cf. *Collier Constructions v. Foskett*, A.L.R. Vol. 97 (1990) at 461.

development.<sup>106</sup> It is especially apposite in research and education, where users of copyright works, such as teachers, students and scholars draw on the work of others in reviewing, criticising, or advancing new arguments or fresh insights. As Justice Sandra Day O’Conner states, making use of copyright materials without seeking permission from the rightsholders is “to promote the Progress of Science and useful Arts”<sup>107</sup> so as to achieve “the advancement of learning and knowledge”.<sup>108</sup>

The fair use exception also prevents the potential danger of rightsholders’ monopolising information. Copyright law was designed to “reward an author for the effort expended in creating a work and giving it to the public”<sup>109</sup>. In this way, granting copyright owners an exclusive right to reproduce, distribute and perform their works, is similar to “the repayment of a debt”<sup>110</sup>, which intuitively is seen to serve as a device to incentivise authors’ innovation. However, unconstrained exclusive rights may prevent many socially beneficial uses of copyright works from taking place. For instance, if a copyright owner overcharged for citing his works, users would have to give up or avoid making use of the work. This effect in turn discourages “good uses”, such as scholars advancing new theories, reviewers criticising, artists performing parodies, lecturers using words or text to teach, and students citing paragraphs in their essays. Thus, the relatively balanced application of fair use is intended to prevent copyright owners from behaving as the allegorical greedy candle manufacturers asking the government to block the sun in order to increase their sales<sup>111</sup>.

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<sup>106</sup> See e.g., *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. (1984) at 417, 429; *United States v. Paramount Pictures, Inc.*, 334 U.S. (1948) at 131, 158. See also, David Lange, “Recognizing the Public Domain”, *Law and Contemporary Problems*, Vol. 44 (1981) at 147; Jessica Litman, “Sharing and Stealing” (2004) available at, <http://www.law.wayne.edu/litman/papers/sharing&stealing.pdf>.

<sup>107</sup> See *Feist Publications, Inc. v. Rural Telephone Service Co.*, 499 US 340, 349(1991).

<sup>108</sup> See Robert A. Kreiss, “Accessibility and Commercialization in Copyright Theory”, *UCLA Law Review*, Vol. 43 (1) (1995) at 20.

<sup>109</sup> See Bently and Sherman, *Intellectual Property Law*, supra note 20, at 32.

<sup>110</sup> Ibid.

<sup>111</sup> See Frederic Bastiat, *Petition From the Manufacturers of Candles, Tappers, Lanterns, Sticks, Street Lamps, Snuffers, and Extinguishers, and From Producers of Tallow Oil, Resin, Alcohol, and Generally of Everything Connected with Lighting*, England (1845). In this parody, Bastiat described a group of candle-sellers who petition the government, “we are suffering from the ruinous competition of a rival who apparently works under conditions so far superior to our own for the production of light that he is flooding the domestic market with it at an incredibly low price; for the moment he appears, our sales cease, all the consumers turn to him, and a branch of French industry whose ramifications are innumerable is all at once reduced to complete stagnation. This rival, which is none

It is interesting to note that fair use also offers protection to some related public interests. As Hugenholtz argues, fair use expresses the concern “to guarantee fundamental freedoms”<sup>112</sup>, such as freedom of expression, information, freedom of the press and the right to privacy. For example, with the protection of fair use, one does not have to ask for permission to make use of a copyrighted work for private study<sup>113</sup>, or make for domestic use a recording of a TV programme<sup>114</sup>. In addition, fair use enables criticism or review of copyright works under certain circumstances<sup>115</sup> without permission, freeing the expression of opinions without undue fear of economic or legal redress.

Public interest justification here is used in a narrow sense. It “merely prevents the claimant from enforcing copyright against the defendant”<sup>116</sup>, without denying copyright protection to the work as a whole. The rationale for this justification lies in the belief copyright not only reflects on extending the protection of rightsholders, but also serves the public by facilitating the propagation of information within the population without recourse to permission from rightsholders. All interests concerned must be carefully balanced within fair use doctrine. In other words, fair use is to serve as a mechanism “offer[ing] a means of balancing the exclusive right of a copyrightsholder with the public’s interest in dissemination of information”.<sup>117</sup> In copyright practice, however, fair use has always struggled to survive.

### ***2.2.3. The Essential of Fair Use: Striking a Balance between Social Benefits and Rightsholders’ Interests***

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other than the sun, is waging war on us so mercilessly we suspect he is being stirred up against us by perfidious”. Available at, <http://bastiat.org/en/petition.html>.

<sup>112</sup> See P. Bernt Hugenholtz, “Fierce Creatures: Copyright Exemptions---Towards Extinction?” *IFLA/IMPRIATUR Conference*, Amsterdam (1997) Available at, <http://www.ivir.nl/publications/hugenholtz/PBH-FierceCreatures.doc>.

<sup>113</sup> See CDPA s.29.

<sup>114</sup> See CDPA s.70.

<sup>115</sup> See e.g., *Newspaper Licensing Agency v. Marks & Spencer* [2000] 4 All ER (CA); *Pro Sieben Media v. Carlton Television* [1999] FSR.

<sup>116</sup> Alexandra Slims, “The Public Interest Defence in Copyright Law: Myth or Reality”, *E.I.P.R.* Vol. 2 (6) (2006) at 335-343.

<sup>117</sup> *Ibid.*

During the history of copyright law, the struggle to balance social benefit and rightsholders' interest has been embodied in both theoretical discourse and legal practice of fair use doctrine.

On the one hand, theoretical evidence suggests conflict between the two elements in fair use practice. In a 2001 paper entitled "*Excuse and Justification in the Law of Fair Use*"<sup>118</sup>, Wendy J. Gordon suggests there is a dichotomy between the "excuse and justification" of fair use doctrine. Gordon asserts that fair use cases can be usefully divided into two categories --- *justification* of fair use and *excuse* of fair use. The "*justification*" category corresponds to instances "where economic norms themselves fail to provide suitable criteria for resolving a dispute"<sup>119</sup>, which arise when we "would not object if others emulated a defendant's lack of permission and/or lack of compensation"<sup>120</sup>. For example, if a woman breaks an assailant's arm to repel a violent attack, she would not be held liable for the arm-break on the ground that the use of the force was "justified". In contrast, the "*excuse*" of fair use identifies cases "where economic norms appropriately govern, but there is a failure of perfect market conditions"<sup>121</sup>, which happens "when something occurs that we do not want to have emulated, but which we allow without imposing liability because of the particular facts of that case"<sup>122</sup>. For instance, the above-mentioned woman may not be liable for breaking the arm because she was delusional in thinking she was being attacked, considering certain relative factors such as the particular circumstances of the attack occur, the purposes and functioning of criminal law. In this case, her action is not legally justified; instead, the law "chooses not to impose a criminal sanction"<sup>123</sup> for other valid reasons.

Borrowing Gordon's theory, we will examine how the theoretical context regarding social benefit and rightsholders' market interest is structured. As with Gordon's commentary, the social benefit function is an analysis of how fair use doctrine as an important copyright principle

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<sup>118</sup> See Wendy J. Gordon, "Excuse and Justification In the Law of Fair Use: Commodification and Market Perspectives", *THE COMMODIFICATION OF INFORMATION*, *Kluwer Law International* (2002) Available at, <http://ssrn.com/abstract=293690>

<sup>119</sup> *Ibid.*, at 4.

<sup>120</sup> *Ibid.*, at 4.

<sup>121</sup> *Ibid.*

<sup>122</sup> *Ibid.*

<sup>123</sup> *Ibid.*, at 7.

can make sense of, and eventually bring to a form of order, the development of public domains such as education, research and scholarship into the category of something “we would not object if others emulated”<sup>124</sup>. In this sense, the social benefit function can be regarded as a *justification* in the law of fair use, which is not easily influenced by changes in circumstances. On the contrary, environment changes are closely relevant to the rightsholders’ market interests, given that “market” is built up on the tension between supply and demand, which is in reality a system prone to great variations. For example, when applying fair use defence, if market failure occurs, copyright law has to allow for fair use practice to work around this; however, if the excusing circumstances, i.e., market failure, disappear, “fair use should and does disappear”<sup>125</sup>. In fair use practice, the social benefit is a *justification* while the rightsholders’ market interests are more likely to be an *excuse*. Being an excuse, rightsholders’ market interests’ fluctuation is likely to result in the failure of applying fair use defence.

Additionally, fair use legal practice also highlights the contested history in balancing social function and private interests. For instance, in *Basic Books, Inc. v. Kinko’s Graphics Corp.*<sup>126</sup>, the court refused *Kinko’s* claim for fair use on the ground that the course-packs directly competed with the potential sales of the original books as assigned for the students, even though most of the works were related to history, sociology and other fields of study, a factor weighting in favour of knowledge advance. Another example is *Encyclopaedia Britannica Educational Corp. v. Crooks*,<sup>127</sup> in spite of the fact that the court was largely sympathetic with the educational purpose, the defendant were not able to benefit from fair use defence given that the educational motion pictures and videos directly competed with the plaintiff’s market for selling or licensing copies to schools. This is especially applicable, in the case of file sharing practice, given that the rightsholders’ market interest has been dramatically influenced due to the special characteristics of file sharing technology. *Napster* court rejected fair use claims by finding that the rightsholders “had expended considerable funds and effort to commence Internet sales and the

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<sup>124</sup> Ibid.

<sup>125</sup> Ibid. at 5.

<sup>126</sup> See *Kinko*, supra note 45.

<sup>127</sup> See *Encyclopaedia Britannica Educational Corp. v. Crooks*, 542 F. Supp. 1156 (W.D.N.Y. 1982).

licensing of digital downloads”<sup>128</sup>, such that Napster’s use of copyright works would “harm the rightsholders’ attempts to charge for the same downloads”<sup>129</sup>. Similarly, *MP3.com* did not benefit from fair use defence either, on the ground that “any allegedly positive impact of defendant’s activities on plaintiffs’ prior market in no way frees defendant to usurp a further market that directly derives from reproduction of plaintiffs’ copyright works”.<sup>130</sup>

Notable within this balanced model is that, although it seems as simple as a normal form of regulation, it has never been applied perfectly in practice. There are a number of potential encumbrances to introducing the principle into legal practice, such as to what extent copyright owners’ interest should be protected; and how, if at all, they can be dealt with by fair use doctrine without “significantly” undercutting public interest. It is clear that no exact answers can be provided to these questions, when one considers that all the relevant factors, such as public interest and copyright owners’ rights, are not measurable with precision. In this sense, we can say that current fair use legislation is directed towards balancing non-quantifiable social benefits and market interest. In other words, in the age of conventional copyright media, fair use doctrine “arguably does what it is supposed to do”.<sup>131</sup> Given that different interpretations of the doctrine may lead to inconsistent comprehensions and practices, the following discussion on current fair use policy issues and legal regimes serves to demonstrate that there is a considerable room for debate and discretion within jurisdictions over the meaning and practice of fair use.

## **2.3. General Policy Issues Embodied in Fair Use Doctrine**

### ***2.3.1. The “Ought” Question or The “May” Question***

General policy background to the fair use doctrine, which is based on a series of international conventions and regional directives, is examined in this section. Towards a full understanding of fair use policies embedded in these conventions, the analytic device from David G. Post, namely,

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<sup>128</sup> See *Napster*, supra note 12, at 1017.

<sup>129</sup> See *Napster*, supra note 12, at 1011, 1013.

<sup>130</sup> See *Napster*, supra note 11, at 352.

<sup>131</sup> See Gordon, supra note 6, at 26.

the dichotomy of “Ought” and “Is”<sup>132</sup> is illustrative to consider. Hence, we first concentrate on different policies of fair use doctrine, i.e., whether fair use *ought* to be or *may* be applied in copyright legislation; then the “three-step test”, an essential principle of applying exceptions to copyright of domestic laws in international level will be analysed.

### **2.3.1.1. The “Ought” Question: Permitted Uses of Copyright Works in Berne and TRIPs**

Faced with the complicated issues within protecting “the rights of authors in their literary and artistic works [in an effective and uniform manner]”<sup>133</sup> as well as preventing these rights from being monopolised, the Berne Convention and the TRIPs expressly allow for certain permitted uses of copyright works notwithstanding authors’ exclusive rights.

Article 9 (2) of Berne 1971 states that “[i]t *shall* be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author”. The “Three-Step Test” set out in this provision, which has turned into an essential principle defining fair use in many legislations, will be discussed in detail later. What is notable here is the application of the word “*shall*” in the provision. Generally, “*shall*” within the legal language of obligation has a mandatory rather than a permissive meaning<sup>134</sup>. Thus, it follows that the decision as to whether or not to legislate an

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<sup>132</sup> See David G. Post, “His Napster’s Voice”, *Temple Environmental Law and Technology Journal*, Vol. 20 (2001). (In this article, Post pointed out that it is necessary to distinguish two conceptions of “is” and “ought”: the question “that *does* copyright law currently make Napster’s activities unlawful?” from the question “*should* copyright law make Napster’s activities unlawful?”)

<sup>133</sup> See Berne Convention, *supra* note 14.

<sup>134</sup> See L.B. Curzon, *Dictionary of Law*, Law Press, 6<sup>th</sup> ed. (2003) at 388. “When used in drafting, ‘*Shall*’ suggests an imperative, a command, as compared with “*May*”, involving permission. For example, “Following a verdict of guilty, the judge *shall* pronounce sentence.” “In the exercise of his discretion, the judge *may* imprison or fine the guilty person”. See “*Storer v. British Gas Plc.*” *The Times* (1 March, 2000). See also, *CALI Lesson: Drafting Contracts Using “Shall”, “May” and “Must”*, CALI Lesson from the University of New Mexico School of Law, available at, <http://lawschool.unm.edu/CALI/lesson.php?lid=565>. (The lesson states that “a large percentage of litigation arising out of contracts results from poor drafting. In order to eliminate this litigation, it is imperative that law students master good drafting skills. One of the most important aspects of drafting a contract is the operative language—language that affects legal relationships. This lesson is designed to introduce law students to operative language commonly used in drafting contracts, in particular, language of obligation (*shall*) language of authorisation (*may*) and language of condition precedent (*must*”). See also, “Titles of the Jamestown S’Klallam Tribal Code, Section 10.2.20”,



exception to its copyright law is not free for Member States to choose, but an obligation for the state, i.e., Member States “ought” to have fair use articles in their copyright law. In addition, Article 10 also makes it mandatory for Member States to permit the users to quote from an already published copyrighted work without permission and compensation provided that the quotations are “fair” and “the sources are attributed”<sup>135</sup>.

The principle that fair use doctrine “*ought*” to be applied in legislation is also incorporated in Agreements of Trade-Related Aspects of Intellectual Property Rights (TRIPs)<sup>136</sup>. As stated in Article 13 of TRIPs, Members of WTO “*shall* confine limitations or exceptions to the exclusive rights to certain special cases which do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the right holder”. Article 13 is drafted to “comply with”<sup>137</sup> the Berne Convention (1971) and to reuse the “Three-Step Test”. As a result, TRIPs also confirms that its member states “ought” to apply the fair use doctrine to their copyright laws. Compared to Article 9 (2) of Berne, however, Article 13 of TRIPs is much broader in scope for the following two reasons. Firstly, TRIPs focuses on confining limitations or exceptions to all “exclusive rights”<sup>138</sup>, whereas Article 9 of Berne only circumscribes the “reproduction right”<sup>139</sup>. Another textual difference which deserves mention is that Article 9 (2) of Berne refers to the “unreasonable prejudice ... of *the author*”, while Article 13(2) of TRIPs restricts its “limitations or exceptions to ... *the right holder*”. The author is usually the first owner of the copyright, so that Berne does not extend its exceptions to the third parties who are assigned the copyright by the first owner. As Sam Ricketson states, “it would be possible for an exception that would otherwise fail under Article 9 (2) of Berne 1971 to withstand scrutiny under Article 13 of WTO/TRIPs”<sup>140</sup>.

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available at, [http://www.jamestowntribe.org/Ordinances\\_files/Title\\_10/2/20..html](http://www.jamestowntribe.org/Ordinances_files/Title_10/2/20..html).

<sup>135</sup> See Berne Convention, Article 10, *supra* note 14.

<sup>136</sup> See TRIPS, *supra* note 14.

<sup>137</sup> See Article 9(1) of the TRIPS, which sets out that the TRIPs should be comply with the Berne Convention by stating, “Members shall comply with Article 1 through 21 of the Berne Convention (1971) and the Appendix thereto”.

<sup>138</sup> See Article 13 of the TRIPs, *supra* note 14.

<sup>139</sup> See Article 9 of the Berne Convention, “Right of Reproduction: 1. Generally; 2. Possible exceptions; 3. Sound and visual recordings”. The article just defines the general regulation, possible exceptions, and legal regulations on sound and visual recordings of Right of Reproduction. *Supra* note 14.

<sup>140</sup> See Sam Ricketson, *The Three-Step Test, Deemed Quantities, Libraries and Closed Exceptions*,

### 2.3.1.2. The “May” Question: Permitted Uses of Copyright Works in Some Other Treaties

However, fair use has not been regarded as an obligation in all legislations. There are some international laws and regional treaties which only offer member states or contracting parties the option to choose whether or not, and to what extent, they include acts of fair use in their domestic copyright legislations. Accordingly, it follows that we should direct our attention towards directives and international conventions which describe fair use as something member states or contract parties “*may*”<sup>141</sup> but not “*shall*” deploy in their domestic laws and regulations. There are three categories of permitted uses contained in these international and regional laws and conventions.

#### 2.2.1.2.1. Contract Parties/Member States “*may*” adopt “Three-step Test”

WTO Copyright Treaty (WCT) 1996 expressly confers that the Contracting Parties *may* provide limitations or exceptions in their domestic laws provided the “Three-step Test” set out in the Berne Convention is met. Article 10 (1) of WCT 1996 states as follows, “Contracting Parties may, in their national legislation, provide for limitations of or exceptions to the rights granted to authors of literary and artistic works under this Treaty in certain special cases that do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the author”. In these situations, Contract Parties or Member States are permitted not to admit copyright limitation of certain works even if the three factors in the Test are fulfilled.

#### 2.2.1.2.2. Contracting Parties/Member States “*may*” provide limitations on some kind of uses

In certain cases, Contracting Parties or Member States are free to provide exceptions or limitations to copyright in their domestic laws and regulations, provided that the range of the

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Sydney: Centre for Copyright Studies Ltd. (2002) at 42-45. Available at, <http://www.copyright.com.au/reports%20&%20papers/CCS0202Berne.pdf>.

<sup>141</sup> “May” as a legal language refers to language of authorisation, which involves permissive. In other words, “may” represents the person has a right to choose do or not do something. See supra note 134.

exceptions or limitations falls under specific categories. Hence the decision as to whether or not to permit an exception or limitation rests with the individual country, but to what extent to define the exception should be limited to a particular category. Article 15 (1) of the Rome Convention 1961<sup>142</sup> makes it clear that Contracting States may protect “private use; use of short excerpts in connection with the reporting of current events; ephemeral fixation by a broadcasting organization by means of its own facilities and for its own broadcasts; use solely for the purposes of teaching or scientific research”.<sup>143</sup> The similar textual description also can be found in Article 10 of Council Directive of Rental Rights (EEC) 1992.<sup>144</sup> Compared to the permitted uses of copyright works in WCT, the Rome Convention and the Rental Rights Directive deploy a more limited and strict approach. In other words, some acts which would be regarded as “fair dealing” in WCT might fail to be accepted as such in the Rome Convention or the Rental Rights Directive.

#### 2.2.1.2.3. *Contract Parties/ Member States “may” choose exceptions from an exhaustive enumeration*

Additionally, some international conventions and regional directives provide an exhaustive enumeration of copyright exceptions and limitations to Member States or Contracting Parties. In these situations, the permitted uses of copyright works adopted in Member States’ domestic laws and regulations are limited within the enumerated list. EC Information Society Directive is an example. Article 5 read with Recital 32 permits Member States to allow third parties to use copyright protected works provided the use is consistent with “the following cases” listed in Article 5 (2) and 5 (3).<sup>145</sup> It is noteworthy that “the following cases” are “exhaustive”. In other words, Member States are free to create exceptions for fair use as they wish, but only within the acts listed in the exhaustive enumeration. Compared to the first two categories, the act of fair use under the third category is the most restricted.

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<sup>142</sup> See Rome Convention, *supra* note 39.

<sup>143</sup> See Article 15 (1) (a)(b)(c)(d) of Rome Convention 1961, *supra* note 39.

<sup>144</sup> See Article 10 (3) of Council Directive 92/100/EEC of 19 November 1992 on rental right and lending right and on certain rights related to copyright in the field of intellectual property (O.J. 1992 L 346/61).

<sup>145</sup> See *EC Information Directive*, *supra* note 15.

### ***2.3.2 The Three-Step Test: An Essential Principle for Fair Use Doctrine***

The “three-step test” was not recognised as a feature of international copyright law until 1967 when it was adopted in Article 9 (2) of the Stockholm Act of the Berne Convention<sup>146</sup>. Main Committee I of the Berne Convention accepted the following text as Article 9 (2) of the Stockholm Act in 1967:

*(2) It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author.*

Since then the “three-step test”, namely, “ in certain special cases”, “not conflict with a normal exploitation of the work” and “ not unreasonably prejudice the legitimate interests of the author”, has been adopted in the TRIPs Agreement<sup>147</sup>, the WIPO Copyright Treaty (WCT) 1996<sup>148</sup>, and the WIPO Performances and Phonograms Treaty 1996 (WPPT)<sup>149</sup>.

Following debates over the meaning and interpretation of the three elements, WTO Panel Reports<sup>150</sup> interpreted that the first step in any exception or limitation adopted in national copyright laws and regulations should “be clearly defined and be narrow in its scope and reach”<sup>151</sup>, whether the purpose of the exception is for public policy or exceptional circumstance justifying the exception. Some scholars argue that the first step in the three-step test is practically meaningless, given the fact that few countries would consider arbitration in determining whether the exception is “special”, on the one hand; any exception to copyright could be regarded as “special” for any exception would “arguably be limited in its field of application”, on the other

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<sup>146</sup> See Stockholm Act of the Berne Convention, Stockholm (July 14, 1967).

<sup>147</sup> See Article 13 of the TRIPs, *supra* note 14.

<sup>148</sup> See Article 10(1) of WCT 1996.

<sup>149</sup> See Article 16 of WPPT 1996.

<sup>150</sup> See WTO Panel Report, United States: Section 110 (5) of US Copyright Act (1999) WT/DS160/R, at 6.112. [Hereinafter, *WTO Panel Report*, in brief]

<sup>151</sup> WTO Panel Report, *supra* note 150, at 6.112.

hand”.<sup>152</sup> However, the significance of the first step lies in the principle that any exception to copyright should be limited to a reasonable scope in order to prevent national laws from taking advantage of copyright exceptions to unduly restrict the rights of rightsholders.

The second step of the test model means that any exception to copyright rights should not conflict with the uses of a work from which the copyrightsholder can exact economic benefits, whether existing or potential. Neither should the exception limit certain non-economic benefits, such as public interest and cultural benefit. This opinion is highlighted by the WTO Panel Report as follows:

*“[I]t appears that one way of measuring the normative connotation of normal exploitation is to consider, in addition to those forms of exploitation that currently generate significant or tangible revenue, those forms of exploitation which, with a certain degree of likelihood and plausibility, could acquire considerable economic or practical importance.”*<sup>153</sup>

The third step is perhaps the most disputable. As described in the observation of the Swedish/BIRPI Programme, there was “the considerable difficulty of finding a formula capable of safeguarding the legitimate interests of the author while having a sufficient margin of freedom to the national legislation to satisfy important social or cultural needs”.<sup>154</sup> According to *WTO Panel Report*,<sup>155</sup> the third step is proposed any exception to copyright should not limit the authors’ and successors’ economic and moral interests, unless the purpose of the use is for public interests or some other interests justified by national laws. Moreover, “unreasonable prejudice” may be excluded in specific cases, such as with payment of a reasonable amount of remuneration. The three-step test has become the foundation for almost all exceptions to copyright at international level. National laws and regulations on practice regarding the exceptions exhibit differences.

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<sup>152</sup> See Daniel J.Gervais, *supra* note 80, at 17. See also, Daniel J.Gervais and Alana Maurushat, “Fragmented Copyright, Fragmented Management: Proposals to Defrag Copyright Management”, *Canada Journal of Law and Technology*, Vol. 2 (2003) at 15.

<sup>153</sup> See WTO Panel Report, *supra* note 150, at 6.118.

<sup>154</sup> See *Records of the Intellectual Property Conference of Stockholm*, *supra* note 146, at 113.

<sup>155</sup> See WTO Panel Report, *supra* note 150, at 6.229.

## **2.4. Legal Regimes of Fair Use Doctrine**

Almost all countries have long sought to achieve a balance between rightsholders' interests and exceptions to their exclusive rights through careful consideration of the way in which fair use doctrine can be carried out in practice. Generally speaking, approaches adopted into national laws on the practice of fair use doctrine can be divided into three styles: the "open-ended provisions" exemplified by the U.S. Copyright Act 1976; the "exhaustive enumeration lists" applied in most civil law legislations; and the "fair dealing" approach adopted in most common law countries such as the U.K.

### ***2.4.1 The Open-ended Approach: The U.S. and Philippines Examples***

As the name indicates, the "open-ended approach" does not deploy specific or narrowly drawn exceptions, but balance statutory elements on a case-by-case basis. In practice, the approach means that the use of a copyrighted work may be regarded as a fair use only if "the court is satisfied that the use is fair"<sup>156</sup>. The United States and the Philippines are the only countries with such an unrestricted fair use doctrine.

The following is the full text of Section 107 of the U.S. Copyright Act of 1976, which sets out the fair use statute in the U.S. copyright law:

#### **Section 107 of the Copyright Act of 1976. Limitations on exclusive rights: Fair Use**

*Notwithstanding the provisions of sections 106 and 106A, the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords of by any other means specified in that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright.*

*In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include---*

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<sup>156</sup> See Bently and Sherman, *Intellectual Property Law*, supra note 18, at 194.

1. *the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;*
2. *the nature of the copyrighted work;*
3. *the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and*
4. *the effect of the use upon the potential market for or value of the copyrighted work.*

The four factors suggested in Section 107, i.e., the purpose and character of the use, the nature of the copied work, the amount and substantiality, as well as the effect upon work's value, need to be considered together when courts are evaluating a use of copyright works. For example, in *Campbell v. Acuff-Rose Music, Inc.*<sup>157</sup>, the judge states that "all [four factor] are to be explored, and the results weighed together, in light of the purposes of copyright".

Similar fair use system has also been adopted in Section 185 of the *Philippine Intellectual Property Code 1997*, which states that

*185.1 The fair use of a copyrighted work for criticism, comment, news reporting, teaching including multiple copies for classroom use, scholarship, research, and similar purposes is not an infringement of copyright. ....*

*In determining whether the use made of a work in any particular case is fair use, the factors to be considered shall include:*

- a) *The purpose and character of the use, including whether such use is of a commercial nature or is for non-profit education purposes;*
- b) *The nature of the copyrighted work;*
- c) *The amount and substantiality of the portion used in relation to the copyrighted work as a whole; and*
- d) *The effect of the use upon the potential market for or value of the copyrighted work.*<sup>158</sup>

The advantage of the open-ended approach is derived mainly from the flexibility in analysing cases, especially in the circumstances of rapidly developing Internet technology. Hence, new

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<sup>157</sup> See *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569 (1994) at 578.

<sup>158</sup> See Section 185 of the *Philippine Intellectual Property Code 1997*.

kinds of uses can be considered on a case-by-case basis, rather than struggling to adapt current legislation to changing technological or social circumstances. However, the most controversial opinion about this approach explores the difficulty in predicting the legal outcome of a behaviour. For instance, when assessing whether the use is a fair use of the original work, the general principle holds that the less amount and substantiality of the portion used in relation to the copyright work as a whole, the more likely that the sample will be considered fair use. However, in *Harper & Row, Publishers, Inc. v. Nation Enters*<sup>159</sup>, the use of less than 400 words from President Ford's memoir by a news magazine was concluded to represent infringement because the words substantially represented "the heart of the book". Conversely, the substantial copying of entire programs in *Sony* case was upheld as fair use.

A typical example reflecting the uncertainty of the open-ended fair use model, especially in the context of digital file sharing, are the issues which arose in "time/space-shifting" case law. Faced with the invention of the "time-shifting" machine Betamax, the *Sony*<sup>160</sup> Court imported the staple article doctrine from patent law to limit how far copyright law could reach into technology markets. The Court concluded that the noncommercial home use recording of television programs over the public airwaves was a fair use of copyright works and did not constitute copyright infringement, by analysing the purpose of the use as well as the market effect of the application of the machine. In another seminal space-shifting case *RIAA v. Diamond Multimedia*,<sup>161</sup> the court held that space-shifting introduced by Rio MP3 player could be regarded as fair use, given that "[Rio] only makes copies in order to render portable those files that already reside on a user's hard drive, [... so that] such copying is a paradigmatic non-commercial personal use entirely consistent with the purposes of the [AHRA] Act".<sup>162</sup> However, some other cases failed to claim time/space-shifting as fair use. For instance, in the context of *My.MP3.com* service, the transformative "space shift" argument was rejected, considering that MP3 made the copies for its own commercial purpose with knowledge of the direct copyright

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<sup>159</sup> See *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. (1985) at 539.

<sup>160</sup> See *Sony Corporation of America, et al., Petitioners v Universal City Studios, Inc., etc., et al.* 464 US 417, 78 L Ed 2d 574, 104 S Ct 774, reh den (US) 80 L Ed 2d 148, 104 S Ct 1619 [No. 81-1687].

<sup>161</sup> See *RIAA v. Diamond Multimedia Sys., Inc.*, 180 F. 3d 1072 (9<sup>th</sup> Cir. 1999) [Hereinafter, *Diamond*, in brief].

<sup>162</sup> *Ibid.*



infringement.<sup>163</sup> In *Napster*, time/space-shifting was not granted as fair use when time/space-shifted copy is available for distribution to millions of other users of the Napster network.<sup>164</sup> Contrary to Napster's interpretation, *Grokster*<sup>165</sup> reaffirmed the *Sony* rule by emphasising that distributing certain copyright works permitted by rightsholders or for the public interest is "substantial noninfringing". Details of these cases will be discussed below.<sup>166</sup>

From above, the unpredictability within fair use case law advances an inconsistency and uncertainty in legal practice. Nimmer<sup>167</sup> surveyed sixty litigated cases on the application of fair use doctrine between 1994 and 2003 and arrived at the conclusion that the four factors in the U.S. fair use doctrine "are not outcome-determinative, either individually or collectively".<sup>168</sup> According to Nimmer's statistics, the four factors corresponded to the conclusion of fair use in only 55%, 42%, 57% and 51% of cases respectively<sup>169</sup>. As he observed, two-fifth of the cases upheld fair use and three-fifth denied its existence, i.e., "[J]udges enter findings as to the four factors in support of their ultimate fair use determination less than half the time"<sup>170</sup>. Moreover, even in the cases in which the four factors incline in favour of fair use, almost 90% of them do not have "predictive value"<sup>171</sup>, but stem from "the malleability of the fair use factors"<sup>172</sup>. Nimmer's study verifies that fair use doctrine does not work predictably in legal practice. Although litigated cases may not represent a "broader universe of fair use disputes"<sup>173</sup>, it is meaningful to demonstrate that there is a gap between fair use doctrine and legal practice.

#### **2.4.2 The Exhaustive Enumerated Approach: Fair Use in Civil Law**

In contrast, there is the other constrained fair use deployment by the means of an "exhaustive enumerated list" of causes for exceptions that permits courts little room to interpret fair use

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<sup>163</sup> See *MP3.com*, supra note 11.

<sup>164</sup> See *Napster*, supra note 12.

<sup>165</sup> See *Grokster*, supra note 13.

<sup>166</sup> See Chapter 3, Part 3.2, at 105.

<sup>167</sup> See David Nimmer, "'Fairest of Them All' and Other Fairytales of Fair Use", *Law and Contemporary Problems*, Vol. 66 (2003) at 263-280.

<sup>168</sup> See David Nimmer, supra note 167. See also, Matthew Sag, *God In the Machine*, supra note 1.

<sup>169</sup> See David Nimmer, supra note 167, at 268.

<sup>170</sup> See David Nimmer, supra note 167, at 280.

<sup>171</sup> See David Nimmer, supra note 167, at 280-284.

<sup>172</sup> See David Nimmer, supra note 167, at 280-284.

<sup>173</sup> See Matthew Sag, supra note 1. See also, George Priest and Benjamin Klein, "The Selection of Disputes for Litigation", *Journal of Legal Studies*, Vol.13 (1984) at 1.

doctrine. Most civil law countries have adopted this “exhaustive enumerated approach”, which allows for very well defined and specified exceptions and limitations to copyright law through an exhaustive enumerated list of causes for exceptions. According to the list, certain clear uses are permitted without authorisation, justification for fairness, or judicial interpretation. There are several civil law examples for the enumeration approach.

Article L122-5 of *Code de la propriété intellectuelle* defines the exceptions to French copyright law, which are strictly confined to categories in a narrow list including certain private uses, such as private family performances, private and personal copying, press reviews, current news reporting, etc.<sup>174</sup> As described by Andre Lucas, French users clearly have no rights to use the copyrighted work except those listed under copyright law.<sup>175</sup> Similar application of the enumerated list is embodied in German copyright law<sup>176</sup>. Section VI of German Copyright Act grants users freedom to use copyright works provided certain conditions are fulfilled, such as the use of copyright works in school broadcasts, in public speech, and for administration of justice or public safety.<sup>177</sup> An interesting principle for copyright exception in French and German copyright law is the “public’s right to information”, which was highlighted in a French case<sup>178</sup>. The French Court suggested that it was a valid defence for infringement that it was to be within the remit of “public’s right to information”, under Article 10.1 of the European Convention on Human Rights.

There also exists a detailed list of exceptions to copyright in Dutch copyright law<sup>179</sup>. Article 15 to Article 25a of their Copyright Act focuses on exceptions for private use. Additionally, there are exceptions on quotations<sup>180</sup>, for either government use<sup>181</sup> or public education<sup>182</sup>. Some

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<sup>174</sup> Article L112-5 of *Code de la propriété intellectuelle*, supra note 21.

<sup>175</sup> Andre Lucas and H.J Lucas, *Traite de la Proprelete Litteraire et Artistique*, 2<sup>nd</sup> ed (2001) at 251-254. See also, Daniel J.Gervais, “Towards a New Core International Copyright Norm: The Reverse Three-Step Test”, available at, <http://law.bepress.com/cgi/viewcontent.cgi?article=1520&context=expresso>.

<sup>176</sup> See German Copyright Act, Urheberrechtsgesetz, UrhG, Sep 1965, amended in May 1998.

<sup>177</sup> See Section VI (Article 45-63) of German Copyright Act.

<sup>178</sup> See TGI Paris, 3<sup>rd</sup> Ch., 23 Feb, 1999, D. 1999 at 580.

<sup>179</sup> See Dutch Copyright Act, 1912, Netherlands.

<sup>180</sup> See Ibid, at 15a.

<sup>181</sup> See Ibid, at 15b.

<sup>182</sup> See Ibid, at 16.

exceptions specific to the field of fine arts are also mentioned. For instance, Article 19 (1) states that, “*The reproduction of a portrait by or on behalf of the person portrayed or, after his death, by or on behalf of his relatives, shall not be deemed an infringement of copyright*”.

In Chinese Copyright Law, exceptions are also provided for certain private use, such as for quotations, use by libraries and archives, and translation for private study and teaching also. What is worthy of note in Chinese Copyright Law is the enumeration list for those to whom the exceptions may be applied. Article 22 and 23 define that the exceptions to rights shall be “applicable to the rights of publishers, performers, producers of sound recordings and video recordings, radio stations and television stations”<sup>183</sup>, as well as the copyright owners.

Under the “exhaustive enumerated” approach, the defined and specified exceptions and limitations to copyright law in a constrained manner allows little room for judicial interpretation, which can potentially lead to a lack of flexibility in applying textual laws and regulations in practice. Once a new situation beyond the current legislation emerges, the legislation has to catch up to restore the balance between existing laws and new circumstances with legal implications. A negotiated settlement might be a long drawn out affair. For example, it generally takes four standard procedures, including “bringing forth a proposal, making a draft, submitting the draft for examination and approval, examining and approving the draft, adopting a law and promulgating the law”<sup>184</sup>, to formulate a new legal document or laws to apply to a changing legal situation in China.

The formation of the French law on copyright and related rights, named as DADVSI (*loi relative au Droit d’Auteur et aux Droits Voisins dans law Socitete de l’Information*)<sup>185</sup>, is also relevant to consider in this aspect. From initial draft to the final Constitutional Council decision, the French Parliament took more than three years to pass the law,<sup>186</sup> which introduces the legal mechanisms

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<sup>183</sup> See Copyright Law of People’s Republic of China (October 2001) Article 22-23.

<sup>184</sup> See The Constitution of People’s Republic of China.

<sup>185</sup> See DADVSI (*loi relative au Droit d’Auteur et aux Droits Voisins dans law Socitete de l’Information*).

<sup>186</sup> The formation of the DADVSI took a long and complicated process. The initial draft of the DADVSI was proposed in 2003 by Minister of Culture Jean-Jacques Aillagon (UMP). The bill was

to protect and enforce technical protection measures for copyright works (i.e., TPMs or DRMs),<sup>187</sup> challenging consumers' fair usage rights originated from *Code de la propriété intellectuelle* L112-5.<sup>188</sup> During the prolonged pending period, the Courts encountered many incidents arising from the uncertainty around this situation. For instance, in the case *UFC Que-Choisir c/Universal Pictures Video Fr. SEV, Films Alain Sarde, Studio Canal*,<sup>189</sup> the Paris Court of Appeal decided that the copyright protection on DVDs (Content Scrambling System) prevented the French consumers from exercising their fair usage rights. In another contrasting case, the Cour de Cassation upheld an appeal by the DVD makers, granting that DRM could be applied "to prevent copying which may cause an unjustified damage to the legitimate interests of authors".<sup>190</sup>

#### **2.4.3 The Fair Dealing Doctrine: UK Example**

Most other common law countries except the United States and the Philippines have adopted a doctrine known as fair dealing, which is defined in a limited manner through a non-exhaustive enumerated list of situations where certain "dealing" with a copyrighted work is permitted, while also leaving some room for judicial interpretation to justify the "fairness" of the use.

This model originates from the UK Copyright Act of 1911,<sup>191</sup> which consists of a list of conditions where dealing is regarded as fair. On the one hand, under UK copyright law, the specific purposes of a fair "dealing" behavior are restricted to research or private study, criticism or review, reporting current events, archives and libraries, and use by visually impaired

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presented to the French Parliament for examination in the National Assembly on December 2005. Until March 21, 2006, the National Assembly approved an amended draft. Then the law was examined by the Senate on May 2006. After three recourses held on June 15, June 22, and July 7, 2006, the decision of the Constitutional Council was submitted to President Jacques Chirac for signature on August 1, 2006. See, <http://www.dadysi.info/>.

<sup>187</sup> See Nicolas Jondet, "La France v. Apple: Who's the dadysi in DRMs?" *SCRIPT-ed*, Vol. 3(4) (2006) at 473.

<sup>188</sup> According to *Code de la propriété intellectuelle* L112-5, French residents may freely make copies of copyright protected works (except softwares) for their private use, and freely display these works within family and friends circle, without the agreement of the copyrightsholder. See supra note 21.

<sup>189</sup> See *UFC Que-Choisir c/Universal Pictures Video Fr. SEV, Films Alain Sarde, Studio Canal*, Cour d'appel de Paris, decision of 22 April 2005.

<sup>190</sup> See *Studio Canal, Universal Pictures video France et SEV c/ S. Perquin, et Ufc que Choisir*, Cour de Cassation (1 re ch. Civ) 28 fevrier 2006.

<sup>191</sup> See Copyright Act 1911, Section 2 (1) (a) 1&2 Geo. 5, C. 46 (Eng.).

readers<sup>192</sup>. On the other hand, when determining the fairness of the dealing, the UK courts apply a criteria similar to the US fair use doctrine, in which a number of factors such as if the work is unpublished<sup>193</sup>, the way to obtain the work<sup>194</sup>, the amount and substantiality taken from the work<sup>195</sup>, the use made of the work<sup>196</sup>, motives for the dealing<sup>197</sup>, and consequences of the dealing<sup>198</sup>, are considered inclusively by the courts.<sup>199</sup> There are slight differences in scope between different jurisdictions about fair dealing defence. For instance, the UK copyright law does not grant commercial use of a database for the purposes of research as a fair dealing.<sup>200</sup> By contrast, in the case *CCH v. Law Society of Upper Canada*, the Canadian Supreme Court decision defines the research in a very broad manner, which clearly states that certain for-profit research can also be fair dealing.<sup>201</sup>

Compared to the open-ended, flexible and potentially adaptive fair use exceptions under U.S. law, the UK fair dealing provision is more restricted in legal practice. We might consider *Google Book Library project*<sup>202</sup> as an example of how intermediary copying could fare under U.S. and

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<sup>192</sup> See Copyright, Designs and Patents Act 1988, C. 48, Section 29-30 (Eng.), amended by the Copyright and Related Rights Regulations 2003. See also, Canada Copyright Act 1985, R.S.C., c C-42, Section 29-30; Australia Copyright Act 1968, C.63, Section 40-42.

<sup>193</sup> See *Hyde Park v. Yelland* [2000] EMLR 363,378, supra note 8 (In this case, the court agreed that it usually could not be fair dealing to use a work that had not been published nor circulated to persons for the purposes of criticism, review or newspaper reporting.)

<sup>194</sup> See *Beloff v. Pressdram* (1973) 1 All ER 241. (In this case, the court concluded that a dealing related to a work which has been stolen or leaked is not fair.)

<sup>195</sup> See *Hubbard v. Vosper* (1972) 2 QB 94-98. (In this case, the court analysed if a parishioner quoting an epitaph on a tombstone in the churchyard is fair dealing depends on the quantity and quality of that is taken.)

<sup>196</sup> Generally, the dealing related to commercial benefit is not fair. See *Newspaper Licensing Agency v. Marks & Spencer* (1999) EMLR 369, 380..

<sup>197</sup> In general, the court will consider the motive for the dealing, e.g., if the dealing is motivated by financial gain, it cannot be fair. See *Hyde Park v. Yelland*, supra note 8, *Beloff v. Pressdram*, supra note 194. See also *Newspaper Licensing Agency v. Marks & Spencer*, supra note 196.

<sup>198</sup> This factor is similar to the fourth factor of the US fair use doctrine, i.e., if the dealing has negative impact on the market benefits of copyright owners, it cannot be fair. See *Hubbard v. Vosper* (1972) 2 QB 84, supra note 9.

<sup>199</sup> See Bently and Sherman, supra note 20, at 195-198.

<sup>200</sup> See CDPA 1988, Section 29 (5).

<sup>201</sup> See *CCH v. Law Society of Upper Canada* [2004] SCC 13 (Canada). (In the case, the court addressed that, “The fair dealing exception under Section 29 is open to those who can show that their dealings with a copyrighted work were for the purpose of research or private study. ‘Research’ must be given a large and liberal interpretation in order to ensure that users’ rights are not unduly constrained. I agree with the Court of Appeal that research is not limited to non-commercial or private context.”)

<sup>202</sup> “*Google Book Library Project*” is a tool from [Google](#) that searches the full text of books that Google scans, [OCRs](#), and stores in its digital database.

U.K. law. As discussed in Chapter 3,<sup>203</sup> a series of lawsuits have been launched in the U.S. by rightsholders against *Google Book Library Project*, which intends to digitise the world's books, making them fully searchable. Facing up to the legal challenge,<sup>204</sup> Google claims that its project falls under the scope of fair use. Scholars undertook an interesting analysis on different situations Google may encounter under U.S. and U.K. copyright law.<sup>205</sup> According to them, Google "at least has a good arguable case under U.S. copyright law"<sup>206</sup>, given the fact that (1) the purpose of Google's use is *not* for commercial interests. In the case of Google Search, Google does not earn revenue even if a user subsequently purchases the work via deep links;<sup>207</sup> (2) the market impact caused by Google's use is small as overall sales and rightsholders' royalties would likely increase, based on Amazon's "Search Inside" practice.<sup>208</sup>

Considering the legality of this project under U.K. copyright law, it is expected that rightsholders could be optimistic about winning a copyright infringement claim. The UK CDA explicitly provides that copies may be made by someone other than the end-user for the purposes of "non-commercial research or private study"<sup>209</sup>, only provided that person "does not know or does not have reason to know"<sup>210</sup> that "more than one copy of the same material [will] be provided at the same time".<sup>211</sup> Google is unlikely to satisfy this criterion on the ground that: (1) *Google Book Library* aims to offer copyrighted information to a hugely varied number of users; and (2) the

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<sup>203</sup> See Chapter 3, Part 3.2.2, at 117.

<sup>204</sup> See e.g., *The McGraw Hill Companies, Inc.; Pearson Education, Inc.; Penguin Group (USA) Inc.; Simon and Schuster, Inc.; John Wiley and Sons, Inc. Plaintiffs, v. Google Inc., Defendant*, S.D.N.Y. Case No. 05-CV-8881-JES.

<sup>205</sup> See e.g., Melanie Costantino, "Fairly Use: Why Google's Book Project Should Prevail under the Fair Use Defense?" *Fordham Intellectual Property, Media and Entertainment Law Journal*, Vol.17 (2006) at 235-277. See Thomas E. Wilhelm, "Google Book Search: Fair Use or Fairly Useful Infringement?" *Rutgers Computer and Technology Law Journal*, Vol.33 (2006) at 107. See Hannibal Travis, Hannibal Travid, "Google Book Search and Fair Use: iTunes for Authors, or Napster for Books?" *University of Miami Law Review*, Vol. 61 (2006). See also, Paul Ganley, "Google Book Search: Fair Use, Fair Dealing and the Case for Intermediary Copying", *Social Science Research Network* (2006) available at, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=875384](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=875384).

<sup>206</sup> *Ibid.*

<sup>207</sup> *Ibid.* at 12-13.

<sup>208</sup> *Ibid.* at 15. Ganley quoted Amazon's Search Inside example to demonstrate that allowing users to perform full text searches and view some sample pages increased Amazon's sale for 9%. See Chris Anderson, "The Zen of Jeff Bezos", *Wired* (Jan 2005) 166.

<sup>209</sup> See UK CDA 1988, Section 39.

<sup>210</sup> *Ibid.*

<sup>211</sup> See UK CDA 1988, Section 38 (2) Section 39 (2) *supra* note 46.

fundamental purposes of *Google Book Library* is for “informational uses”,<sup>212</sup> which does not fit within the scope of “non-commercial research or private study”<sup>213</sup> as understood within current UK copyright law. Thus, it then follows that providing a searchable e-index of works to researchers is not a fair dealing under UK copyright law, even though it may benefit research enormously.<sup>214</sup>

## 2.5. Conflicts in Current Fair Use Policy and Legal Practice

It is generally recognised that any law or regulation cannot operate in a vacuum. Incorporating fair use doctrine into international policies and domestic laws has played a crucial role in protecting access to knowledge, as well as in promoting free trade and sustainable innovation on an international scale<sup>215</sup>. The issues surrounding a national scheme of fair use should be considered from a variety of different angles, such as that the national law must conform to its international copyright obligations, domestic policies on fair use should not be obstacles for free trade with other countries, and that fair use legislation should be coherent with other domestic legal doctrines. Hence, national law of fair use should not only be consistent with international standards<sup>216</sup> in its own domain, but also be coherent with other domestic legal doctrines. The current outstanding issue, however, is the variability in the degree of application of fair use, especially in the context of new technology, which stems from the confusing relationship between different international policies and national laws encompassing fair use doctrine. As Weinreb argued, the current fair use statute “[is] not the embodiment of copyright’s blended nature, but a placeholder for all manner of arguments about limits”<sup>217</sup>, so that it has become “too

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<sup>212</sup> See Paul Ganley, *supra* note 205.

<sup>213</sup> See *supra* note 211.

<sup>214</sup> *Ibid.*

<sup>215</sup> See TRIPs, *supra* note 14. See also, Pamela Samuelson, “Challenges for the world Intellectual Property Organization and the Trade-Related Intellectual Property Rights Council in Regulating Intellectual Property Rights in the Information Age”, *E.I.P.R.* Vol. 21 (11) (1999) at 591.

<sup>216</sup> See e.g., Article 10 of Berne Convention suggests that any national law of fair use should be based on the three-step test so that to be consistent with “fair practice”. *Supra* note 17. See also, Michael J. Madison, “Fair Use, Social Practice, and the Future of Copyright Reform”, *Cardozo Arts and Entertainment Law Review*, Vol. 23(2) (2005) at 391-418.

<sup>217</sup> See Lolyd L. Weinreb, “Fair Use”, *Fordham Law Review*, Vol. 67 (1999) at 1291-1292.

many things to too many people to be of much specific value to anyone”.<sup>218</sup>

In illustration via U.S. Copyright Act, the following analyses substantive defects of fair use policies and legal practices; thereafter the specific issues within adopting fair use doctrine into the file sharing environment will be discussed. To clarify substantive conflicts existing in current fair use policies and laws, I will classify the problem related to fair use practice into “internal conflict” and “external conflict”. The internal problem refers to problems existing in *different fair use statutes and provisions*, whether at international or domestic level. By contrast, external problems have to do with *the relationship between fair use and other legal doctrines*, for instance, the long-term conflict between fair use doctrine and the first Amendment of the Constitution of the United States.

### ***2.5.1. A Case Study of the Internal Conflict: WTO Dispute on Section 110 (5) of the U.S. Copyright Act***

As mentioned above, the lack of harmonisation among international policies and laws may provide Member States with different explanations on fair use doctrine, leading to confusion for Member States when deploying fair use doctrine in their own domestic copyright laws and regulations. The WTO Dispute on Section 110 (5) of the U.S. Copyright Act<sup>219</sup> demonstrates the internal problems from inconsistent policies on fair use doctrine.

In October 1998, the US passed its *Fairness in Music Licensing Act* amendments to Section 110

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<sup>218</sup> See Madison, *supra* note 216.

<sup>219</sup> See, WTO Panel Report, *supra* note 150. According to Article 33 of Berne Convention, “Any dispute between two or more countries of the Union concerning the interpretation or application of this Convention, not settled by negotiation, may, by any one of the countries concerned, be brought before the International Court of Justice by application in conformity with the Statute of the Court, unless the countries concerned agree on some other method of settlement. The country bringing the dispute before the Court shall inform the International Bureau; the International Bureau shall bring the matter to the attention of the other countries of the Union.” As a result, The European Communities (“EC”) initiated WTO panel proceedings against the U.S. for alleged incompatibility between Section 110(5) of the U.S. Copyright Act of 1976 (“Act”) and the 1971 Berne Convention (“Convention”) as incorporated into the TRIPS Agreement (“TRIPS”). Para. 1.2, 1.7 and 3.1. Available at, <http://www.asil.org/ilib/ilib0319.htm#04>.



(5) of its Copyright Act 1976,<sup>220</sup> which states that in certain places such as bars, shops and restaurants, the displays of copyrighted radio or television programmes on their premises is permitted, and the users of the copyright works do not have to obtain prior permission, nor have to pay a fee for such use. On April 21, 1997, the European Commission (EC) received a complaint from the Irish Music Rights Organization (IMRO)<sup>221</sup> and GESAC<sup>222</sup> to question Section 110 (5) of the U.S. Copyright Act by claiming that the provisions in Section 110 (5) offended Article 11*bis*(2) of the Berne Convention 1971 as incorporated by reference into Article 9 (1) of TRIPs.

The EC argued that Section 110 (5) does not meet the requirement of Article 11*bis*(2) of the Berne Convention 1971, which permits exceptions to the exclusive right to authorise broadcasts, public performances and public communications of musical works provided that “equitable remuneration be paid”, given that Section 110 (5) was drafted as a “no permission/no payment exception”. However, the U.S denied Section 110 (5) breached Berne 1971, on the ground that the “homestyle exception” complied with Article 13 of TRIPs. They claimed that Article 13 operated as an overriding, independent measure through which to assess any permitted uses contained in domestic legislation, because Article 13 of TRIPs applied even in cases in which the particular use was specifically provided for under Berne 1971.

The WTO Panel granted a preliminary injunction in favour of the EC. It concluded that Section 110 (5) (b) did breach the Berne Convention, given that rightsholders would suffer economic prejudice when the non-dramatic musical works were transmitted in public, as the right-holders normally expect a license to be sought for such use.<sup>223</sup> At the same time, Section 110 (5) (a) was

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<sup>220</sup> See Section 110 (5) of U.S. Copyright Act 1976, which states, “communication of a transmission embodying a performance or display of a work by the public reception of the transmission on a single receiving apparatus of a kind commonly used in private homes, unless- (a) a direct charge is made to see or hear the transmission; (b) the transmission thus received is further transmitted to the public”.

<sup>221</sup> IMRO is a collection society to administer, license and enforce the rights of its member composers, publishers, lyricists and arrangers as well. See, Commission Decision of 11 December 1998, under the provisions of Council Regulation (EC) No. 3286/94 concerning section 110(5) of the Copyright Act of the United States of America (notified under document C(1998) 4033) 1998 O.J. (L 346) at 60.

<sup>222</sup> GESAC is the Groupement Europeen des Societes d'Auteurs et Compositeurs (European Group of the Societies of Authors and Composers) which has a membership around 480,000 rightsholders.

<sup>223</sup> See WTO Panel Report, *supra* note 150, at 6.66.

affirmed as not conflicting with TRIPs because it “was limited to special cases, i.e., dramatic musical works”. Furthermore, for these special dramatic musical works, the Panel agreed, right-holders did not usually license the public transmission of the works so they had suffered little economic damages.

The American experience demonstrates that, firstly, internal problems are concerned with the relationship between international policies on fair use. In this case, it is crucial to interpret the connection between the Berne Convention and TRIPs, given that the US argued it was not breaching the Berne Convention because its provision met the dictates of Article 13 of TRIPs. According to the WTP Panel’s decision, there is a general principle to interpret the texts of different treaties in a way that any conflicting issues can be reconciled. In their words, “[O]ne should avoid interpreting the TRIPS Agreement to mean something different than the Berne Convention except where this is explicitly provided for.”<sup>224</sup> Secondly, the relationship between domestic fair use laws and international policies also deserves particular attention. Through applying the “minor exceptions”<sup>225</sup> doctrine, the Panel concluded that the US “homestyle” exception belonged to “minor exceptions”. Hence, it is not necessary for the US to follow the model in Berne Convention in fashioning an exception, but rather, as a government, the US “may choose between different options for limiting the right in question, including use free of charge and without an authorisation by the rights holder.”<sup>226</sup>

### ***2.5.2. An External Problem Examination: Fair Use and the U.S. First Amendment***

The external problem originates from the unclear relationship between fair use and other legal doctrines. An effective and efficient intellectual property law system, which presupposes coherent and compatible legal doctrines and practices, depends on individuals feeling that they

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<sup>224</sup> See WTO Panel Report, *supra* note 150, at 6.66.

<sup>225</sup> The ‘minor exceptions’ doctrine applies to the rights of public performance, recitation, broadcasting, recording and cinematography. What exceptions can be made in respect of the translation right recognized under Berne 1971 is less clear. For more complete review of both the express and implied exceptions under Berne 1971. See also, Ricketson, S., “WIPO Study on Limitations and Exceptions of Copyright and Related Rights in the Digital Environment”, *SCCR/9/7 Report for the Standing Committee on Copyright and Related Rights* (June 2003) available at: [www.wipo.int/documents/en/meetings/2003/sccr/pdf/sccr\\_9\\_7.pdf](http://www.wipo.int/documents/en/meetings/2003/sccr/pdf/sccr_9_7.pdf).

<sup>226</sup> See WTO Panel Report, *supra* note 150, at 6.88.

will not be confused by the relationship between one legal doctrine and others. In other words, the application of fair use should not conflict with other legal principles or doctrines in an “ideal” jurisprudence. It is, however, possible to see the lack of clarity in the relationship between fair use and the doctrine of compulsory and statutory licenses<sup>227</sup>; between fair use and the “circumvention of technological protection measures”<sup>228</sup>; and between fair use and the use of ARM (Automated Rights Management) or DRM (Digital Rights Management)<sup>229</sup>. The incompatible relationship between fair use and the First Amendment of the U.S Constitution demonstrates the external problem.

Copyright has a long history of uneasy co-existence with the First Amendment. Before the 1976 General Copyright Revision, the division between copyright and private lives was relatively clear. As Alan Latman describes, “private use is completely outside the scope and intent of restriction by copyright”.<sup>230</sup> The developed technological circumstance, however, have altered the previous accommodation. To prevent or minimise economic damage resulting from the rapid emergence of cheap personal copying methods provided by innovative new technologies, the copyright industries revisited the conflict between copyright and the First Amendment once again. They argued that, for a public domain of some sort to be maintained, copyright law must consider the constitutional requirement in the first place.<sup>231</sup>

Two typical cases, from among a number of cases, will amply demonstrate the inevitably direct conflict between fair use doctrine and the First Amendment. The first, *Universal City Studios v. Reimerdes*,<sup>232</sup> known as the *DeCSS* case, presented the first real challenge to the anti-

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<sup>227</sup> See Section 114,115,119 and 121 of the US Copyright Act 1976.

<sup>228</sup> See Digital Millennium Copyright Act, Section 1202 of Title 17. See also, Severine Dusollier, “Electrifying the Fence: The Legal Protection of Technological Measures for Protecting Copyright, Cet article a Ete publie dans”, *E.I.P.R.*, Vol. 6 (1999) at 285-297. See also, J.Carlos Ferna Andez-Molina, “Law against the Circumvention of Copyright Technological Protection”, *Emerald Journal of Documents*, Vol. 95(1) (2003) at 41-68.

<sup>229</sup> See Tom W. Bell, “Fair Use v. Fared”, supra note 43. See also, John S. Erickson, “Fair Use, DRM and Trusted Computer”, *Communications of the ACM*, Vol. 46(4) (2003) at 34-39.

<sup>230</sup> See *Sony* case, supra note 22.

<sup>231</sup> See Diane Leenheer Zimmerman, “Is There a Right to Have Something to Say? One View of the Public Domain”, *Fordham Law Review*, Vol. 73 (2004) at 297. See also, John Tehranian, “Fair Use? The Triumph of Natural-Law Copyright”, *University of Christopher Davis Law Review*, Vol. 38 (2005) at 465.

<sup>232</sup> See *UNIVERSAL CITY STUDIOS, INC., et al., Plaintiffs v. Shawn C. REIMERDES, et al.*,

circumvention provisions of the Digital Millennium Copyright Act of 1998 (DMCA). In *DeCSS*, defendants Web site owners claimed that the behaviour of promulgating the software *DeCSS*, which was to decode the scrambled signal on the plaintiff's DVDs though the Internet, was a fair use under Section 107 of the U.S. Copyright Act. They also argued that the "anti-circumvention provisions" of the DMCA violated their freedom of expression guaranteed by the First Amendment. However, the court ordered an injunction in favour of the plaintiffs. It noted that the plaintiffs had suffered irreparable harm because of the defendants' action violating their copyright works, such that the fair use defence needs be rejected. Moreover, the Supreme Court made clear that DMCA as applied to posting and linking of computer programs does not contravene the First Amendment, by stating that one who "engages in some conduct that is clearly proscribed [by the challenged statute] cannot complain of the vagueness of the law as applied to the conduct of others."<sup>233</sup> From the *DeCSS* cases, we can see the First Amendment would not hold in favour of copyright as "an important capacity to contribute toward a system of free expression"<sup>234</sup>, but pay more attention to the new technological circumstances. In other words, the point is that "the sheltered place copyright once enjoyed under the constitution has gone".<sup>235</sup> Thus, the conflict between applying fair use in new technological circumstances and maintaining constitutional rights becomes more complicated.

Another case illustrating the incoherent relationship between fair use and the First Amendment is *Sun Trust v. Houghton-Mifflin Company*<sup>236</sup>, i.e., the "*Wind Done Gone*" case, in which the 11<sup>th</sup> Circuit Court, for the first time, overturned a preliminary injunction grounded in the First Amendment.<sup>237</sup> The Court addressed that there are "[c]onflicting interests that must be accommodated in drawing a definitional balance" between copyright and the First Amendment. In establishing this balance "[o]n the copyright side, economic encouragement for creators must be preserved and the privacy of unpublished works recognised. Freedom of speech [in

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*Defendants*, 111 F.Supp.2d 294 (SDNY 2000).

<sup>233</sup> Ibid.

<sup>234</sup> David Lange and Jennifer Lange Anderson, "Copyright, Fair Use and Transformative Critical Appropriation", *The Conference on the Public Domain*, Duke Law School (2001) at 135.

<sup>235</sup> Ibid.

<sup>236</sup> See *Sun Trust v. Houghton Mifflin Company*, 136 F.Supp. 2d 1357, DC. (vacated by 11<sup>th</sup> Cir) (May, 2001).

<sup>237</sup> See David Lange and Jennifer Lange Anderson, *supra* note 234.

contradistinction] requires the preservation of a meaningful public or democratic dialogue, as well as the uses of speech as a safety valve against violent acts, and as an end in itself’.

From the above, it is evident that legal practice is much exercised by the internal and external problems related to fair use legislation. In fact, some scholars question whether the current fair use legislations are capable of determining the outcome of copyright cases, especially in the environment of new technology. Michael Madison indicates the doctrine is “so fragmented as to make it useless as a predictive device”, and “abstract to the point of incoherence”<sup>238</sup>. Kenneth Crews also describes fair use as “among the most hopelessly vague of legal standards, [causing] ample confusion among[st] lawyers and lay persons alike, who often need to understand its nuances and live by its tenuous and fragile principles”<sup>239</sup>.

## 2.6 Conclusion

For those using copyright protected materials for research and educational purposes, fair use doctrine is the most important copyright exception they may rely on against rightsholders’ exclusive rights. This leads to a need for fair use doctrine to safeguard the public interest and protect rightsholders’ legitimate benefits in a desirable environment. However, since the emergence of fair use doctrine, its flexibility and uncertainty in legal practice has made the doctrine a disputable topic.

In seeking fundamental reasons for such flexibility and uncertainty in fair use practice, it is necessary to recall the general policy issues and legal regimes of fair use doctrine. From above, disharmony between international policies and domestic laws has resulted in internal problems (e.g., the WTO Panel Dispute on the relationship between the Berne Convention and TRIPs), and external confusions (such as the subtle connection arising from contradiction resolution between fair use copyright law and the First Amendment) in placing fair use into settled practice.

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<sup>238</sup> See Michael Madison, “A Pattern-Oriented Approach to Fair Use”, *supra* note 6, at 1525,1587.

<sup>239</sup> See Kenneth D. Crews, “The Law of Fair Use and the Illusion of Fair Use Guidelines”, *Ohio State Law Journal*, Vol.62 (2001) at 605-606.

The impact of digital file sharing on domestic fair use legislations also deserves particular attention, given the multiplicity of current legal approaches of deploying fair use. Whether by “open-ended” approach, “exhaustive enumerated list” or “fair dealing” doctrine, such diversity serves to emphasise that any one of the legal systems is less than perfect for fair use practice. In other words, fair use as a legal principle is not clear and consistent in either legislation or practice in these circumstances as outlined.

The following chapter is an analysis of how digital file sharing development challenges fair use practice, with the aim of evaluating the potential and/or actual role of fair use defence and the problems encountered in the context of file sharing.

## Chapter 3. Fair Use and File Sharing

Adapting copyright protection in the context of digital file sharing does not only involve extending protection for rightsholders. The public interest is both the reason for granting protection and also on providing argument for limiting it.<sup>1</sup> As recognised in previous chapters, fair use is a safety valve in the copyright system allowing access to copyright works without the author's consent in certain limited circumstances where it serves the public interest. However, flexibility originating from international policies and domestic legislation on fair use doctrine has resulted in uncertainty and unpredictability in copyright practice. Since there is no consensus of opinion on whether and how fair use defence should be applied in digital file sharing, this chapter will examine the interpretation of fair use doctrine in the context of file sharing through case studies, and thereby help to address essential questions in solving the fair use dilemma in digital file sharing: whether, and why, the application of fair use doctrine shrinks with the growth of file sharing?

In this Chapter, I will:

- (1) Address the “Who” issue of fair use doctrine in traditional copyright environment, i.e., the principal party who may be entitled to benefit from fair use defence.
- (2) Discuss the reasoning behind, and the extent of how far the “Who” issue has moved into the context of file sharing. Focusing on whether technology intermediaries are involved in direct copying activities, I categorise the cases as those involving technology intermediaries whose users make the copies and may have defence of fair use (as exemplified by *Napster*,<sup>2</sup> *Grokster*<sup>3</sup> and *BitTorrent* lawsuits<sup>4</sup>), and those where fair use defence is claimed by the file

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<sup>1</sup> Christophe Geiger, “Copyright and Free Access to Information: for a fair use of interests in a globalised world”, *E.I.P.R.*, Vol. 28(7) (2006) at 366-373. See also, Gillian Davis, “Copyright and the Public Interest”, *Model Legal Studies*, Sweet and Maxwell, 2<sup>nd</sup> ed. (2002). See also, Pamela Samuelson, “Economic and Constitutional Influences on Copyright Law in the United States”, *U.S. Intellectual Property Law and Policy*, Edward Elgar Publishing, 1<sup>st</sup> ed. (2006) at 164-204.

<sup>2</sup> See *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004 (9<sup>th</sup> Cir. 2001). [Hereinafter, *Napster*, in brief]

<sup>3</sup> See *Metro-Goldwyn-Mayer Studios, Inc v. Grokster Ltd* 259 F. Supp. 2d 1029 (C.D. Cal. April,

sharing intermediaries making copies themselves for users who may have fair use rights (such as *MP3.com*<sup>5</sup> and *Google Book Library Project* cases<sup>6</sup>).

(3) Finally, I will explore if the public interest can ever be reconciled with rightsholders' interests under fair use doctrine as currently conceived. In particular, the reasons behind an imbalance between social benefits and rightsholders' interests in the context of file sharing will be examined.

### **3.1. The “Who” Issue—Taking Advantage of Fair Use in the Traditional Copyright Environment**

As any court will consider whether the defendant is entitled to benefit from fair use defence, i.e., the “who” question, at the initial stage of a copyright infringement case, the following seeks to define who is entitled to the advantage of fair use defence in the age of the printing press.

#### **3.1.1. The Primary Infringer**

In most cases, the person who makes direct use of the copyright work, namely, the primary infringer, would claim for fair use defence. According to Bently and Sherman, for a fair dealing defence, “it is important to note that all that is meant by dealing is that the defendant has made use of the work”<sup>7</sup>. This principle is also embodied in some statutes. For example, Section 107 of the U.S. Copyright Act of 1976 states that fair use is applied to “the use made of a work”<sup>8</sup>. UK copyright law describes fair dealing as “specif[ied] acts which may be done in

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2003) [Hereinafter, *Grokster District*, in brief]. *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster Ltd.*, 380 F.3d 1154, 1162-1166 (9<sup>th</sup> Cir. 2004) [Hereinafter, *Grokster 9<sup>th</sup> Cir.*, in brief]. *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster Ltd al Supreme Court (04-0480)*, 545 U.S., 125 s. Ct. 2764 (2005) [Hereinafter, *Grokster Supreme*, in brief].

<sup>4</sup> See e.g., *See Columbia Pictures, et. al. v. Justin Bunnell, et.al*, 245 F.R.D. 443 (C.D. Cal. 2007) (August 24, 2007).

<sup>5</sup> See *UMG Recordings, Inc. v. MP3.Com*, 92 F. Supp. 2d 349, 351 (SDNY). [Hereinafter, *MP3.com*, in brief]

<sup>6</sup> See e.g., *The Author's Guild v. Google*, No.05-CV-8136 (S.D.N.Y.) filed (Sep 20, 2005). See also, *McGraw-Hill Companies, Inc. v. Google*, No.05-CV-8881 (S.D.N.Y.) filed (Oct 19, 2005).

<sup>7</sup> Lionel Bently and Brad Sherman, *Intellectual Property Law*, New York: Oxford University Press Inc., 4<sup>th</sup> ed. (2003) at 194. [Hereinafter, *Bently, Intellectual Property Law*, in brief]

<sup>8</sup> See Section 107 of U.S. Copyright Act 1976.



relation to copyright”, as stated in Section 28 (1) of CDPA<sup>9</sup>.

Current case law, in addition, identifies the primary infringer as a main body benefitting from fair use defence. For instance, in deciding whether a defendant falls within the protection of fair use doctrine, the courts have to construe the purpose for which the work has been used. As Chadwick pointed out in *Newspaper Licensing Agency v. Marks & Spencer*<sup>10</sup>, “the purpose for which the copying is done ... can be brought within a liberal interpretation of the phrase ‘for the purpose’ of [the infringement]”<sup>11</sup>. Implicit in this, the specific purposes of the dealing should be examined according to the subjective motives of the primary infringer<sup>12</sup>. The decision of *Hyde Park v. Yelland*<sup>13</sup> shows that the court must “judge the fairness by the objective standard of whether a fair minded and honest person would have dealt with the copyright work in the manner”. Thus, the dealing could be regarded as fair dealing as long as the primary infringer can show that “they were acting benevolently or were motivated by some altruistic or noble cause”.<sup>14</sup>

Other factors<sup>15</sup> in deciding a fair use case are also related to the primary infringer’s activities, either directly or indirectly. For example, fair use is less likely to be applicable if the primary infringer obtained the copyrighted work by illegal means such as stealing or leaking.<sup>16</sup> The fact that the primary infringer used more than half of a work may lead to failure in claiming for fair dealing defence, on the ground that exacting “too many and too long”<sup>17</sup> of the copyrighted work is not regarded as being fair. The commercial benefits derived from the primary infringer’s use made of a copyrighted work, whether the nature of the work is in favour of fair use, will weigh

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<sup>9</sup> See Section 28(1) of UK Copyright, Design and Patent Act 1988 [Hereinafter, *CDPA*, in brief].

<sup>10</sup> See *Newspaper Licensing Agency v. Marks and Spencer* [2000] 4 All ER 239, 257

<sup>11</sup> Ibid. at 75. See also, *Pro Sieben Media v. Carlton Television* [1999] FSR 610, 620.

<sup>12</sup> See *Bently, Intellectual Property Law*, supra note 7, at 195.

<sup>13</sup> See *Hyde Park v. Yelland* [2000] EMLR 363, 379, at 36 (CA).

<sup>14</sup> See *Bently, Intellectual Property Law*, supra note 7, at 197.

<sup>15</sup> As Bently explains, these factors influencing the determination whether a dealing is fair include the method by which the copyrighted work has been obtained, the amount and substantiality of the work being taken, the use made of the work, the effect of the use upon the potential market for or value of the copyrighted work, and whether there are other means with less intrusion on copyright owners’ rights provided as well. See *Bently, Intellectual Property Law*, supra note 7, 195-198.

<sup>16</sup> The method of obtaining the copyrighted work used by the primary infringer is an element considered by the court in deciding a fair use case. See *Beloff v. Pressdram* [1973] 1 All ER 241.

<sup>17</sup> The amount taken from the copyrighted work is another element which has influence on the court’s decision. See *Hubbard v. Vosper* [1972] 2 QB 84. Lord Denning MR said the court “must consider the number and extent of the extracts” in determining whether a use made of the work is fair.

against fair use defence, as embodied in *Basic Books, Inc. v. Kinko's Graphics Corp.*<sup>18</sup>

The above analysis demonstrates that the primary infringer is generally recognised, both in literal statute and in legal practice, as the main body allowed the advantage of fair use defence. In brief, the primary infringer is one party who can claim for and benefit from the fair use defence in a copyright infringement case.

### **3.1.2. Copying by Third Parties**

The primary infringer, it is generally held, is the one who does the illegal copying directly. In certain circumstances, however, third parties may be involved in copyright infringing behaviour, i.e., the primary actor may be a person other than the alleged defendant. There might be a case, for instance, where an agent such as a research assistant or a librarian “makes and supplies a copy of an article in a periodical”<sup>19</sup> for researchers or students. Therefore, it is not necessary for the behaviour resulting in the copyright infringement to be undertaken by the defendant himself.

At least two factors, where the direct infringing activity is done by a third party, have to be considered for the fair use defence to be applied. That the copying activity must be for the defendant's own research or study is the first, as shown in the case *Sillitoe v. McGraw Hill Book Co.*<sup>20</sup>. The *Sillitoe* court suggested that the defendants “could not avail themselves of the exceptions of [fair dealing doctrine] since they were not engaged in private study or research but were merely facilitating this for others”<sup>21</sup>. Secondly, a defendant cannot claim for fair dealing if the person performing the copying knows or has reason to know that more than one copy of the material will be provided.<sup>22</sup> Thus it follows that copying by a third party other than a defendant

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<sup>18</sup> See *Basic Books, Inc. v. Kinko's Graphics Corp.*, 758 F. Supp. 1522 (S.D.N.Y. 1991). In *Kinko* case, the court held that Kinko's infringed copyrights because the copying was for commercial purposes, which had a direct effect on the market for the books, in spite of the fact that most of the works were for “course packs”---a factor is indeed in favor of fair use. [Hereinafter, *Kinko*, in brief]

<sup>19</sup> See Section 37-38 of CDPA 1988.

<sup>20</sup> See *Sillitoe v. McGraw Hill Book Co.* [1983] FSR 545.

<sup>21</sup> See *Sillitoe v. McGraw Hill Book Co.* [1983] FSR, at 545. See also, *Longman Group v. Carrington Technical Institute* [1991] 2 NZLR 574 (CANZ).

<sup>22</sup> See Section 29(3)(b) of CDPA 1988, “in any other case, the person doing the copying knows or has reason to believe that it will result in copies of substantially the same material being provided to more than one person at substantially the same time and for substantially the same purpose”, the copying is not fair dealing.

is not a fair dealing if the third party knows or has reason to know that the copying will lead to copies of the same material being provided to more than one person at substantially the same time and for substantially the same purpose. For example, the teacher cannot use fair dealing defence when he makes multiple course packs for his students.

From the above, it is possible to apply fair use defence to the researcher or student, despite the fact that the alleged infringement is accomplished by a third party, only if the copying is for the researcher or student's own research or study; and there is no more than one substantial copy being provided at the same time for the same purpose.

### ***3.1.3. Copying for Third Parties***

The fair use/dealing defence applicable to the librarian deserves particular attention, given that the special role of the librarian, as a primary actor who actions the alleged infringement for a third party, is similar to a technology intermediary. In other words, the librarian is entitled to apply for fair dealing defence, although he merely provides a platform for the alleged infringement with his direct copying activities.

The U.S. Copyright Act grants libraries and archives an explicit exemption for copyright infringement, provided that the library copy is (1) to make no more than three copies; (2) made by a library or archive or by employees of such acting within the scope of their employment; (3) not be associated with any commercial purposes; (4) to be copied from a public collection; (5) include a notice of copyright.<sup>23</sup> Similar library exemption can also be found in UK CDPA. The CDPA 1988 provides librarians of any prescribed library with a number of fair dealing defence<sup>24</sup>. Section 38-39 of CDPA allows the librarian of a prescribed, non-profit library to "make and supply a copy of an article in a periodical or parts of published works", on conditions that: (1) [It is] for purposes of research or private study<sup>25</sup>; (2) no more than one copy of the same material [will be] provided at the same time<sup>26</sup>; and (3) a cost no less than the actual cost is required<sup>27</sup>.

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<sup>23</sup> See 17 U.S. Copyright Act § 101, 108(b)-(e) (2000).

<sup>24</sup> See Section 37-39 of CDPA 1988.

<sup>25</sup> See UK CDPA 1988, Section 38 (2) (a), and Section 39(2) (a).

<sup>26</sup> See UK CDPA 1988, Section 38 (2) (b), and Section 39(2) (b).

It is noteworthy that current copyright legislation confirms that the library exemption only applies to physical libraries. For example, Section 105-109 of Digital Millennium Copyright Act 1998 clarifies that “digital libraries and archives that exist only in the virtual (rather than physical) sense on ... the Internet” do not fall within the library copyright exemption.<sup>28</sup> The UK CDPA 1988 provides librarians of “prescribed, non-profit libraries” with the fair dealing defence.<sup>29</sup> Libraries are defined by the Secretary of State as *inter alia* school, university, and local authority libraries.<sup>30</sup> Thus, the online searching and index service such as *Google Library project*, as discussed below, may be excluded from such exemption.<sup>31</sup>

In summary, there are three categories of individual who may be considered eligible to use fair use defence in traditional copyright environment: the primary infringer, the researcher or student not directly involved in the alleged infringement, and the librarian copying for third parties.

### 3.2. The “Who?” Issue --- Fair Use in File Sharing Circumstances

The above discussion on fair use is mainly based on traditional copyright industries, including the basic copyright industries such as newspapers and periodicals, book publishing, music publishing and the copyright-related industries such as radio and television.<sup>32</sup> However, with innovative usages of new technologies, the situation has been significantly altered. In contrast to traditional copyright situations, the parties to which fair use doctrine has been applied in the

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<sup>27</sup> See UK CDPA 1988, Section 38 (2) (c), and Section 39(2) (c).

<sup>28</sup> See U.S. Digital Millennium Copyright Act 1998, Section 105-109.

<sup>29</sup> See UK CDPA 1988 Section 37. See Copyright (Librarians and Archivists) (Copying of Copyright Material) Regulations 1989 (SI 1989/1212).

<sup>30</sup> See UK CDPA 1988 Section 37(1) (a).

<sup>31</sup> See Part 3.2.2.2, at 117.

<sup>32</sup> Some people divide copyright industries into four groups, i.e., the core copyright industries, the partial copyright industries, the distribution industries, and the copyright-related industries. See Stephen E. Siwek, “Copyright Industries in the U.S. Economy”, *International Intellectual Property Alliance* (2002) available at: [http://www.iipa.com/pdf/2002\\_SIWEK\\_FULL.pdf](http://www.iipa.com/pdf/2002_SIWEK_FULL.pdf). (The report defines copyright industries as the core copyright industries such as “newspapers and periodicals, book publishing and related industries, music publishing, radio and television broadcasting, cable television, records and tapes, motion pictures, theatrical productions, advertising and computer software and data processing”; the partial industries including “part of whose products are copyright materials. These industries range from fabric to business forms to architecture”; the distribute industries, such as transportation services, libraries, and wholesale and retail trade involved in the distribution of copyrighted products; the copyright-related industries, for example, those that produce and distribute products that are used wholly or principally in conjunction with copyright materials, such as computers, radios, televisions, and consumer recording and listening devices.)

context of digital file sharing are mainly divided into two categories: the primary infringer, namely, end-users of file sharing networks uploading, downloading, or distributing copyright works without copyright owners' permission, and the file sharing intermediary, namely, file sharing tool providers.

Applying fair use defence to the primary infringer in file sharing networks is similar to its usage in the traditional copyright environment. The issues around whether the primary infringer is entitled to benefit from fair use doctrine can be considered from different aspects, such as the purpose of the use, the amount taken from the copyright works, and the market effect resulted from the primary infringing activities, amongst others.

The role of file sharing intermediaries in the application of fair use defence deserves particular attention. The special nature and function of file sharing intermediaries has been reflected in, and also serves to highlight the difference between file sharing providers, and traditional third party copying intermediaries. As demonstrated in the cases below, there exist two types of file sharing intermediaries being involved into copyright lawsuits. The first type includes those whose users make the copies and may have defense of fair use, as evidenced in *Napster*<sup>33</sup> and *Grokster*<sup>34</sup>. Unlike traditional copying intermediaries, these file sharing intermediaries offer the primary infringer a technical platform, which is not involved in any direct infringing conducts. Thus the problem emerges as being whether and how a party who is neither the primary infringer nor the primary actor of the alleged infringement is supposed to exercise fair use defence. The second, exemplified by *MP3.com*<sup>35</sup> and *Google Library Project*<sup>36</sup>, claim fair use for their own copying activities to serve users who may have fair use rights. These file sharing intermediaries provide the alleged infringer with direct copying activities, which is a parallel with those copying for third parties in the traditional copyright environment.

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<sup>33</sup> See *Napster*, supra note 2.

<sup>34</sup> See *Grokster*, supra note 3.

<sup>35</sup> See *MP3.com*, supra note 5.

<sup>36</sup> See *Google Library Project*, Part 3.2.2.2, at 118.

The aim of this subpart is to examine the dramatic conflict existing in fair use practice in the context of digital file sharing, and consider how fair use doctrine has responded to these new challenges. Recent cases illustrate endeavours which have been deployed to adopt fair use into the new technological environment.

### ***3.2.1. End-Users / Technology Intermediaries Whose Users Make the Copies and May Have Defense of Fair Use***

In Chapter 1, we established that file-sharing systems have legal and socially beneficial uses, especially for research and educational users. File sharing networks have potential technical advantages for the distribution of information, and this would otherwise be possible for researchers to use them access in a more effective and efficient way for their private study, research or classroom teaching. As the scenarios listed in Chapter 1 show<sup>37</sup>, faculty, students and scholars can rapidly access valuable information, reduce man-hours and man-labour, and distribute their works freely using academic file sharing technologies, if their uses of copyright works are allowed fair use. However, “[a]nalogue-era exceptions to copyright do not apply easily to the Internet environment”<sup>38</sup>. Current case law indicates that it is proving difficult for defendants to take advantage of the fair use doctrine in the context of digital file sharing.

#### **3.2.1.1. Sony: Fair Use Encountering New Technology**

As a landmark decision for applying fair use to a new technological environment, *Sony*<sup>39</sup> deserves particular attention by highlighting the uncertainty of the applicability of fair use in the context of new technology.

*Sony* concerned the problem of whether creators of new technologies capable of infringing uses should be liable for users’ subsequent infringing activities. As regards the emergence of *Betamax* videocassette recorder, the U.S. Supreme Court borrowed the “staple article of commerce”

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<sup>37</sup> See Chapter 1, Part 1.3.1.2, at 46.

<sup>38</sup> See Daniel J. Gervais, “Towards a New Core International Copyright Norm: The Reverse Three-Step Test”, *Marquette Intellectual Property Law Review*, Vol. 1(9) (2005) at 27.

<sup>39</sup> See *Sony Corp. of America v. Universal City Studios, Inc.*, 480 F. Supp 429 (C.D.Cal 1979), rev’d 659 F 2d 963 (9<sup>th</sup> Cir 1981), rev’d 464 US 417 (1984). [Hereinafter, *Sony*, in brief].

standard from patent law and held that the sale of the *Betamax* or any other articles of commerce which are capable of copying copyright protected works does not constitute contributory infringement, if “the product is widely used for legitimate, unobjectionable purposes” or is “capable of substantial non infringing uses”.<sup>40</sup>

In *Sony*, a principle non-infringing use of the *Betamax* of taping television programs to watch later, i.e., “time-shifting”, was granted as a fair use, given the fact that there was little evidence that the use of *Betamax* would harm or potentially harm rightsholders’ market interests. According to the Court, firstly, “time-shifting [is] a noncommercial [and] nonprofit activity”<sup>41</sup>. There was no evidence to demonstrate that television advertising revenues, motion picture attendance, video-tape rentals or any other potential market interests of the rightsholders’ were diminished arising from the application of *Betamax*.<sup>42</sup> Secondly, the Court noted that there was possibility that time-shifting would “aid plaintiffs rather than harm them” by expanding audiences to include those unable to watch the initial broadcast of a program.<sup>43</sup> Therefore, it was concluded that “home-shifting of [copyrighted] programs is legitimate fair use”<sup>44</sup>, on the ground that the time-shifting video recording machine did not indicate “any likelihood of non-minimal harm to the potential market for, or the value of, copyright works”<sup>45</sup>. Thus, this was indicative that “[c]ongress has the constitutional authority and the institutional ability” to support “major technological innovations [that] alter the market for copyright materials”.<sup>46</sup>

Different explanations on the *Sony* decision lead to debates over adopting *Sony* principle to following cases. As Travis discussed, a broad reading of *Sony* suggests that developing a technology with potential to serve copyright infringing activities is not an infringement, unless the technology is not capable of substantial non-infringing uses, regardless of whether the technology developer “knows or should have reason to know”<sup>47</sup> the infringement.<sup>48</sup> In a

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<sup>40</sup> See *Sony*, supra note 39, at 442.

<sup>41</sup> See *Sony*, supra note 39, at 497.

<sup>42</sup> See *Sony*, supra note 39, at 456.

<sup>43</sup> See *Sony*, supra note 39, at 453-454.

<sup>44</sup> See *Sony*, supra note 39, at 454-460.

<sup>45</sup> See *Sony*, supra note 39, at 456-464.

<sup>46</sup> See *Sony* case, supra note 22, at 417, 431.

<sup>47</sup> See *Sony*, supra note 39, at 464, 431.

<sup>48</sup> See Hannibal Travid, “Google Book Search and Fair Use: iTunes for Authors, or Napster for Books?” *University of Miami Law Review*, Vol. 61 (2006). See, e.g., *Grokster*, supra note 3.

narrower sense, a market-orientated explanation favoured by rightsholders states that *Sony* represents a “staple article of commerce doctrine” which does not apply where the new technology serves commercial copying, where the principal use is to assist unlicensed reproduction, display or distribution of copyright works to unauthorised persons, or where the use of such technology harms or potentially harms rightsholders’ market interest.<sup>49</sup> As analysed below, this narrow explanation of *Sony* decision has been embodied in *Napster*, *Grokster* and *MP3.com* cases.

### 3.2.1.2. The *Napster* Case

*Napster*<sup>50</sup> was the first case examining fair use doctrine in P2P networks eventually heard by the U.S. Ninth Circuit Court of Appeal in 2001. In *Napster*’s case, the “harm to [rightsholders’] established market [and] the right to develop alternative markets”<sup>51</sup> finally resulted in *Napster*’s failure in claiming fair use defence.

Initially, it is necessary to consider whether the primary infringer, i.e., the *Napster* end-user, is entitled to benefit from fair use defence. Unlike the *Betamax* consumers, the majority of *Napster* end-users were found by the Court to be “copying, downloading, uploading, transmitting, or distributing plaintiffs’ copyrighted musical compositions and sound recordings protected by either federal or state law, without express permission of the rights owner”,<sup>52</sup> which constitutes direct infringement of copyright owners’ rights. In other words, according to the Courts, *Napster* users are engaged in direct copyright infringement while the *Sony* consumers’ home-shifting behaviour is not related to infringement. Thus, the *Napster* users cannot benefit from the protection of fair use doctrine.

With respect to the role of *Napster* as a technical intermediary in applying fair use defence, the Ninth Circuit took the opposite road to the *Sony* decision by refusing to explore the connections between fair use and the “staple article of commerce doctrine. The Court rejected *Napster*’s

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<sup>49</sup> See, e.g., *Napster*, supra note 2. See also, *Brief of Amici Curiae Office of the Commissioner of Baseball*, et al. in support of petitioners, see *Grokster Supreme*, supra note 3.

<sup>50</sup> See *Napster*, supra note 2, at 919, 920.

<sup>51</sup> See *Napster*, supra note 2, at 1043.

<sup>52</sup> See *Napster*, supra note 2, at 4222.



argument that its users' activity of using plaintiff's copyright works amounted to fair use of the material for "at least" two reasons.<sup>53</sup> Firstly, the use of the Napster network was deemed to have harmed the market, given the data provided by the Jay Report which stated "evidence of lost sales attributable to college use to be probative of irreparable harm for purposes of the preliminary injunction motion".<sup>54</sup> Secondly, the Court considered that *Napster* commercially used the entire copyright works to enjoy a financial benefit as "financial benefit exists where the availability of infringing material 'act as a draw' for customers ... [whereas] Napster's future revenue is directly dependent upon increases in user base'.<sup>55</sup> Thus, being a technical intermediary deriving a commercial benefit from the primary infringement, *Napster* lost its chance of claiming fair use defence for its end-users.

The other factor which might have been considered in applying fair use defence to *Napster* is whether the *Napster* P2P technology was "space-shifting". Independently of the *Sony* decision, the *Napster* court did not follow the "staple article of commercial doctrine", but read the P2P network technically. It operated in a very restrictive manner to differentiate between the *Napster* P2P technology and the "shifting" analyses of *Sony*<sup>56</sup> and *Diamond*<sup>57</sup>. According to the Court, the *Napster* P2P technology is not a fair use because "the methods of shifting [in P2P networks] ... simultaneously involve distribution of the copyright material to the general public; ... [rather than] only to the original user".<sup>58</sup> In other words, the method of shifting the copyright material in *Napster* networks is not "fair", so that *Napster* end-users' infringing activities cannot reside within fair use.

In *Napster*, as analysed above, neither the end-user nor the technology intermediary applied the fair use doctrine successfully. On the one hand, the primary infringer is not entitled to fair use

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<sup>53</sup> See *Napster*, supra note 2, at 4229.

<sup>54</sup> See *Napster*, supra note 2, at 4234.

<sup>55</sup> See *Napster*, supra note 2, at 919, 920, 1021.

<sup>56</sup> See *Sony*, supra note 39 (In this case, a video tape recorder machine Betamax, which is regarded as a "time-shifting" machine, was held as a fair use).

<sup>57</sup> See *RIAA v. Diamond Multimedia System, Inc.*, 180 F. 3D 1072 (9<sup>th</sup> Cir. 1999) [Hereinafter, *Diamond*, in brief] (In this case, a portable MP3 player Rio was regarded as "space-shifting" on the ground that it only made copies in order to render portable. This "space-shifting" technology was held by the Court as a paradigmatic noncommercial personal use, so that "space-shifting" was a fair use.)

<sup>58</sup> See *Napster*, supra note 2, at 4239.

defence, given that they did illegally copy and distribute copyright works. On the other hand, the file sharing technology provider, namely, *Napster* as technical intermediary, failed to claim fair use defence either, considering the commercial benefit derived from the technology, and the technical contribution to the primary infringement. As the Court declared, “having digital downloads available for free on the Napster system necessarily harms the copyright holders’ attempts to charge for the same download”,<sup>59</sup> and “any allegedly positive impact [...] on plaintiffs’ prior market in no way frees [the] defendant to usurp a further market that directly derives from reproduction of the plaintiffs’ copyright works”.<sup>60</sup>

### 3.2.1.3 The *Grokster* Case

In 2004, the Ninth Circuit Court of Appeals affirmed the broad reading of the *Sony* decision in favour of a file sharing intermediary, *Grokster*, who had been sued by major motion picture studios, record labels, and other individual rightsholders.<sup>61</sup> Both the District Court and the Ninth Circuit in *MGM v. Grokster*<sup>62</sup> released *Grokster* from liability for copyright infringement because of its decentralised technical design. Unlike the centralised indexing architecture used in *Napster*, *Grokster* did not maintain either central servers or login process for the end-user.<sup>63</sup> In view of this, the Courts held that *Grokster* should be free of copyright liability, given that *Grokster* did not have “reasonable knowledge of specific infringing files”, nor did it “fail to act on that knowledge to prevent infringement”.<sup>64</sup> Following the *Sony* decision, the Ninth Circuit found that the software was capable of substantial non-infringing uses, including works in the public domain and works authorised by rightsholders.<sup>65</sup> This established for the first time that file sharing technology was regarded as an intermediary with “substantial non-infringing” use.

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<sup>59</sup> See *Napster*, supra note 2, at 1469-1471.

<sup>60</sup> See *Napster*, supra note 2, at 1017.

<sup>61</sup> See *Grokster* 9<sup>th</sup> Cir, supra note 3.

<sup>62</sup> See *Grokster* 9<sup>th</sup> Cir. and *Grokster District*, supra note 3.

<sup>63</sup> See *Grokster* 9<sup>th</sup> Cir, supra note 3, at 1163.

<sup>64</sup> See *Grokster* 9<sup>th</sup> Cir. and *Grokster District*, supra note 3.

<sup>65</sup> See e.g., *Grokster* can be used for “distribut[ing] movie trailers, free songs or other non-copyright works; [being] used in countries where it is legal; [being] applied to facilitate and search for public domain materials, government documents, media content for which distribution is authorised, media content as to which the rightsholders do not object to distribution, and computer software for which distribution is permitted”. See *Grokster* 9<sup>th</sup> Cir, supra note 3, at 1161-1162.

However, the Supreme Court borrowed another principle from patent law—the inducement principle—and formulated a theory of secondary liability based on “purposeful, capable expression and conduct”.<sup>66</sup> According to the Court, a product distributor may be liable for the resulting acts of infringement by third parties using the device, if “[he] distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement, going beyond mere distribution with knowledge of third-party action”,<sup>67</sup> regardless of the device’s lawful uses. Specifically, the Supreme Court outlined three main reasons that led to *Grokster*’s failure.

Firstly, it held that *Grokster* intentionally induced or encouraged direct infringement. In the Court’s analysis, *Grokster* attempted to “constant[ly] refer to *Napster*”<sup>68</sup> in its company documents and promotional materials, targeting at former Napster users.<sup>69</sup> Additionally, there was no evidence that *Grokster* made any effort towards developing any filtering devices or other mechanisms to monitor or control the infringing use of their software.<sup>70</sup>

Secondly, the Court found that *Grokster* generated business and revenue through selling advertising space, although the company received no revenue from users.<sup>71</sup> Especially, the Court argued that *Grokster*’s potential revenue relied on “the high volume of users and the availability of large amounts of commercially appealing materials”<sup>72</sup>.

Finally, based on MGM’s evidence that “nearly 90% of the files available for download on the *Grokster* were copyright works”,<sup>73</sup> the Supreme Court found that a substantive volume of the use of *Grokster* was a function of free access to copyrighted work. Although some non-infringing copying activities might exist in *Grokster*, the Court claimed that “the remaining 10%” of

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<sup>66</sup> The *Grokster* borrowed the inducement theory from U.S. patent law, which states that “Whoever actively induces infringement of a patent shall be liable as an infringer”. See S 271(b) U.S.C.A. 35. See *Grokster Supreme*, supra note 3, at 2078.

<sup>67</sup> *Ibid.* at 486, 410-424.

<sup>68</sup> *Ibid.* at 2781.

<sup>69</sup> *Ibid.* at 2781.

<sup>70</sup> *Ibid.* at 2781.

<sup>71</sup> *Ibid.* at 2774-2776.

<sup>72</sup> *Ibid.* at 2774-2776.

<sup>73</sup> *Ibid.* at 2772.

potential non-infringing uses “should not qualify as ‘substantial’”.<sup>74</sup> Therefore, the Supreme Court denied that *Grokster* had made a strong evidentiary showing of “substantial non-infringing use”, claiming that the Ninth Circuit’s judgment rested on an erroneous understanding of *Sony* as precedent.

Interestingly, the Court did not clearly address fair use in *Grokster*. The opinion of the Supreme Court ignored the assertion that “at least some of”<sup>75</sup> *Grokster* users uploading, downloading, or distributing authorised copyrighted files might rightly rely on fair use defence. Justice Breyer argued that *Grokster* permitted transfer of about 10 percent of non-infringing files, a number similar to the 9 percent that the Court found acceptable in *Sony*,<sup>76</sup> where the issue was claimed as fair use. However, the majority of the Court aligned in favour of the other concurring opinion from Justices Ginsburg, Roberts and Kennedy, which dismissed the evidence of fair use, denoting that “there ha[d] been no finding of any fair use and little beyond anecdotal evidence of non-infringing uses”.<sup>77</sup>

It is noteworthy that there is a power contest between various interests involved in the new context of file sharing.<sup>78</sup> As Bowery stated, “[L]aw is a conservative force not only because of its ties with established power, but also because legal power contests change”.<sup>79</sup> The *Napster* and *Grokster* Court decisions highlighted the conflict between old and new modes of production and commercial parties in the changed social circumstances. For instance, the *Napster* court leaned conservatively towards protecting the benefits of traditional copyright holders without sufficiently considering the profits of *Napster*. According to Bowery,

*“the [Napster] judicial view is that copyright law should serve a particular culture of expectation: protecting the established industry’s structure and plans for development*

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<sup>74</sup> Ibid. at 2774-2776.

<sup>75</sup> Ibid, at 2778.

<sup>76</sup> See *Sony*, supra note 39.

<sup>77</sup> See *Grokster Supreme*, supra note 3, at 2785-2786, Justice Ginsburg chided the Ninth Circuit for failing to “distinguish between uses of *Grokster*’s software products (which this case is about) and uses of peer-to-peer technology generally (which this case is not about)”.

<sup>78</sup> See Kathy Bowery, *Law & Internet Cultures*, Cambridge: Cambridge University Press (2005), at 152. See also, John Braithwaite and Peter Drahos, *Global Business Regulation*, Cambridge: Cambridge University Press (2000).

<sup>79</sup> See Kathy Bowery, supra note 78, at 152.

*of the market. Interference with these private 'plans' is piracy".*<sup>80</sup>

Comparatively, the District Court in *Grokster* was in favour of *Grokster* by affirming that “it is the users of the [*Grokster*] software who, by connecting to each other over the internet, create the network and provide the access and emphasizing the network dimension of the software”.<sup>81</sup> However, adoption of the “inducement” theory indicated that the *Grokster* Supreme Court was pursuing a conservative approach.<sup>82</sup> The significant issue of power contest which has been involved in the digital file sharing environment deserves particular attention, since it, to some degree, explains the inconsistency and flexibility within file sharing legal practice.

Thus, similar with the *Napster* decision, *Grokster* indicated that digital file sharing technology might not benefit from the defence of fair use. This was also held true even when the architecture did not provide any direct technical support for infringement, as *Grokster* was “not significantly different from companies [selling] home video recorders or copy machines, both of which can be and are used to infringe copyrights”<sup>83</sup>. By emphasising that the decentralised P2P technology provider could not claim defence of fair use, *Grokster* took a step further than *Napster* in removing the defence of fair use from file sharing intermediaries.

#### **3.2.1.4. Lawsuits against BitTorrent**

As described in Chapter 1,<sup>84</sup> when sharing digital files through BitTorrent, a peer first creates a small file called a “torrent”, which includes metadata about both the files to be shared and the “tracker”, i.e., the computer coordinating the file distribution. To download a specific file, peers need to obtain a torrent file and connect to the tracker, which identifies the peers currently transferring the pieces of the file. Such specific technical design takes *Grokster*’s decentralised P2P network idea to a different level by assisting end users to download parts of the same file from multiple users simultaneously. Similar to its antecedents, BitTorrent has encountered opposition from rightsholders due to perceived misuse of torrent technology. Although as yet

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<sup>80</sup> Ibid.

<sup>81</sup> See *Grokster District* and *Grokster 9<sup>th</sup> Cir.*, supra note 3

<sup>82</sup> See *Grokster Supreme*, supra note 3

<sup>83</sup> See *Grokster Supreme*, supra note 3, at 2784.

<sup>84</sup> See Chapter 1, Part 1.1.2, at 26.

there has been no major superior court decision akin to the Napster or Grokster cases determining whether or not BitTorrent torrent or client sites are “illegal”, there are two separate ‘streams’ of lawsuits against BitTorrent currently active.

Firstly, rightsholders have targeted BitTorrent search sites, also known as “hubs”. These Torrent hubs are vulnerable, being the cataloguing tool for Torrent files. Although the torrent files offered on the Torrent Sites did not contain actual copies of alleged copyright material, a large number of Torrent Sites, such as EliteTorrents, SuprNova.org, eDonkey, LokiTorrent and TorrentSpy have been closed down for assisting copyright infringement by end-users. For example, the Motion Picture Association of America (MPAA) filed a lawsuit<sup>85</sup> in 2006 against search engines and news groups affiliated with BitTorrent networks. According to MPAA, the defendants’ website provided links to third-party sites containing BitTorrent files and links to files stored on the cache of defendants’ websites. In 2007, the District Court denied defendants’ argument that RAM holds data for such a short duration so as not to store subject to later access and retrieval.<sup>86</sup> It was held that data stored in RAM, however temporarily, is electronically stored information subject to discovery under the circumstances of the instant case. Thus, the Court found in favour of the MPAA effectively shutting down the TorrentSpy.

Following the U.S. and European precedent, BitTorrent server operators have been challenged in many other countries. For instance, the Australian Recording Industry Association (ARIA) has taken down more than 50 file sharing hubs since 2005.<sup>87</sup> Numerous BitTorrent hubs have also been sued in Japan, Hong Kong, Singapore, and so on.<sup>88</sup>

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<sup>85</sup> See *Columbia Pictures, et. al. v. Justin Bunnell, et.al*, 245 F.R.D. 443 (C.D. Cal. 2007) (August 24, 2007).

<sup>86</sup> Ibid. at 447-449.

<sup>87</sup> See Kristyn Maslog-Levis, “BitTorrent Hubs Close after ISP Raid”, *CNET News.com* (March 18, 2005), available at, [http://news.cnet.com/BitTorrent-hubs-close-after-ISP-raid/2100-1030\\_3-5625768.html](http://news.cnet.com/BitTorrent-hubs-close-after-ISP-raid/2100-1030_3-5625768.html).

<sup>88</sup> See, e.g., On December 2006, the Kyoto District Court convicted the creator of the Winny P2P file sharing program for assisting copyright violations and sentenced to pay a fine of 1.5 million yen (about 13,200 US\$). This is the first Japanese case in which the software developer was held responsible for unlawful activities of others. Available at, <http://www.asahi.com/english/Herald-asahi/TKY200612130292.html>. See also, *HKSAR v. Chan Nai Ming*, FACC No. 3 of 2007, Hong Kong.

Secondly, rightsholders have acted against individual end-users of Torrent sites. In November 2004, the Recording Industry Association of America (RIAA) launched lawsuits against 761 people who had allegedly shared substantial amounts of copyright works.<sup>89</sup> In August 2005, the MPAA published a press release named “*You Can Click, But You Can’t Hide!*” to announce its plan to fight against individual BitTorrent file traders.<sup>90</sup> By then, more than 30 BitTorrent sites had been closed and thousands of end-users had been engaged in court.<sup>91</sup> Moreover, the MPAA started international copyright lawsuits by suing those residents outside the U.S. For instance, in March 2005, two British men who ran websites which allegedly once supported the BitTorrent P2P application were threatened by the MPAA by a million dollar penalty.<sup>92</sup> In addition, criminal enforcement action has been taken to target individuals committing copyright infringement on BitTorrent sites. For example, the Hong Kong Court of Final Appeal confirmed the 2005 decision by the Magistrates’ Court, and concluded that Chan Nai Ming, a Hong Kong citizen, be the first person in the world to be convicted of a crime for using BitTorrent file sharing.<sup>93</sup> In November 2003, two Japanese users of Winny P2P file sharing program were arrested by the Japan Kyoto Prefectural Police, being accused of a criminal offence for sharing copyright materials via Winny.<sup>94</sup>

It is noteworthy to mention that the RIAA’s latest extensive campaign against Torrent file sharing has moved to textbook torrents. According to the report by the Chronicle of Higher Education,<sup>95</sup> Textbook Torrents have involved a variety of copyright materials being shared

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<sup>89</sup> See John Oate, “RIAA Sues File-sharing US Students”, *The Register* (Nov 22, 2004) available at, [http://www.theregister.co.uk/2004/11/22/riaa\\_sues\\_students/print.html](http://www.theregister.co.uk/2004/11/22/riaa_sues_students/print.html).

<sup>90</sup> See “Motion Picture Industry Takes Action Against Peer to Peer Movie Thieves Handed Over by Several Torrent Sites: You Can Click, But You Can’t Hide!” *MPAA Press Release* (Aug 25, 2005) available at, [http://www. Respectcopyrights.org](http://www.Respectcopyrights.org).

<sup>91</sup> Ibid.

<sup>92</sup> In March 2005, two British Citizens Kevin Reid and Alexander Hanff were sued by the MPAA for running BitTorrent hubs. See Graeme Wearden, “UK Man Threatened with BitTorrent Lawsuits”, *CNET News.com* (March 18, 2005) available at, [http://news.cnet.com/2100-1032\\_3-5626029.html](http://news.cnet.com/2100-1032_3-5626029.html). See also, Ashlee Vance, “Hollywood Threatens to Sue UK BitTorrent Man for Millions”, *CNET News.com* (March 15, 2005) available at, [http://www.theregister.co.uk/2005/03/15/mpaa\\_hanff\\_suit/](http://www.theregister.co.uk/2005/03/15/mpaa_hanff_suit/).

<sup>93</sup> See, *HKSAR v. Chan Nai Ming*, FACC No. 3 of 2007, Hong Kong. *HKSAR v. Chan Nai Ming*, TMCC 1268/2005. *HKSAR v. Chan Nai Ming*, HCMA 1221/2005.

<sup>94</sup> See, Japan Winny case (2006) Available at, <http://www.asahi.com/english/Herald-asahi/TKY200612130292.html>.

<sup>95</sup> See Jeffery R. Young, “Textbook Grows Online, Promoting a Counterattack from Publishers”, *The Chronicle of Higher Education* (July 1, 2008) available at, <http://chronicle.com/free/2008/07/3623n.htm>.

among college students without rightholders' permission. By July 2008, publishers have "largely acted on an ad hoc basis [...] and targeted the sites making the material available".<sup>96</sup>

The post-*Napster* file sharing systems such as BitTorrent are much harder to sue out of their existence, considering the difficulty in tracking pieced torrent files and volatile trackers. There is, however, still the problem that legal access to research and educational materials by lawful users through such file sharing networks may be prejudiced. In 2007, the US RIAA published a list of *Top Twenty Five of universities* based on the number of piracy notices which college administrations had issued students.<sup>97</sup> The pressure from entertainment industries has forced a large number of universities to restrict the use of all file sharing on the campus computer network, regardless of the potential lawful use of such systems.<sup>98</sup>

### ***3.2.2. Technology Intermediaries Which Make Copies Themselves for Users Who May Have Fair Use Rights***

Compared to *Napster* and *Grokster*, in *MP3.com* and *Google* the file sharing intermediaries did copy for users who may enjoy fair use defence. Thus, the fair use issues surrounding these cases are, to some degree, similar to those where there is copying for third parties as discussed in Part 3.1.3<sup>99</sup>. Hence, *MP3.com* and *Google* are not only primary infringers, making copies for their end-users, but also the party pursuing that such infringing be protected by the affirmative defence of fair use.

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<sup>96</sup> See John Timmer, "Campus Copyright Battle Moves to Textbook Torrents", *Ars Technica* (July 1, 2008) available at, <http://arstechnica.com/news.ars/post/20080701-campus-copyright-battle-moves-to-textbook-torrents.html>.

<sup>97</sup> See Darren Murph, "RIAA Lists Top 25 Universities Handing out Piracy Notices", *AOLTech* (Feb 22, 2007) available at, <http://www.engadget.com/2007/02/22/riaa-lists-top-25-universities-handing-out-piracy-notices/>.

<sup>98</sup> See, e.g., Ohio University announced the restriction of the use of all P2P file sharing on the campus network on April 25, 2007. According to the university, "the Network is a shared resource, but ... P2P file sharing consumes a disproportionate amount of resources, both in bandwidth and in support". Available at, <http://www.ohio.edu/students/filessharing.cfm>. In UK, some universities such as Cardiff University banned BitTorrent sites from being accessed through the university network, in response to large numbers of notices from IFPI in 2007.

<sup>99</sup> See Part 3.1.3, at 104.



### 3.2.2.1. *UMG Recordings v. MP3.com*

In April 2000, the New York court held *MP3.com*, an online music subscription provider, liable for copyright infringement. *MP3.com* launched a service named “My.MP3.com” by purchasing thousands of CDs and copying the recordings on to its server, in order to replay the recordings for its subscribers.

*MP3.com* argued that its service was the “functional equivalent” of storage for its subscribers’ CDs, given that a subscriber had to “prove” he had already owned the CD before accessing the *MP3.com* service, and so justifying its actions as fair use. The Court found in favour of the plaintiffs on three grounds: firstly, there was sufficient evidence that the *MP3.com* Company was trying to “attract as many subscribers as possible so as to draw advertising”.<sup>100</sup> Secondly, *MP3.com*’s argument for transformative “space shift” was irrelevant. Unlike the portable MP3 player discussed in *Diamond*<sup>101</sup>, the Court found that *MP3.com* was simply another way of “repackage[ing] the copyright works to facilitate their transmission through another medium”<sup>102</sup>, with no “new aesthetics, new insights and understandings”<sup>103</sup> to the original works. Thirdly, the Court rejected *MP3.com*’s opinion that the record companies had “traditional, reasonable, or likely to be developed” right to grant or withhold a license to perform such a service.<sup>104</sup> According to the Court, the licensing market “directly derives from” rightsholders’ exclusive rights, which entitles rightsholders the right to “curb the development of such a derivative market by refusing to license a copyrighted work or by doing so only on terms the copyright owner finds acceptable”.<sup>105</sup> Thus, *MP3.com*’s service was asserted to invade the rightsholders’ right to license their sound recordings to others for reproduction.

### 3.2.2.2. *Google Library Project Lawsuits*

In late 2004, Google launched *Google Library Project*, aiming to “organise the world’s

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<sup>100</sup> See *MP3.com*, supra note 5, at 592.

<sup>101</sup> See *Diamond*, supra note 57.

<sup>102</sup> See *MP3.com*, supra note 5, at 593.

<sup>103</sup> See *Castle Rock Entertainment, Inc. v. Carol Publishing Group, Inc.*, 150 F. 3d (2d Cir. 1998), at 132, 142.

<sup>104</sup> See *MP3.com*, supra note 5, at 352.

<sup>105</sup> See *MP3.com*, supra note 5, at 592.

information and make it universally accessible and useful”.<sup>106</sup> As part of the project, Google Library scheme aims to digitise and make searchable the collections of institutional partners. However, the Project has attracted opposition from some copyright owners and publishers. In September 2005, the Authors Guild and several individual authors sued Google for “massive copyright infringement”<sup>107</sup>. A month later, McGraw-Hill and four other publishers filed a similar case against Google.<sup>108</sup> The Google litigation catalysed debate on whether those copying to promote online searching and indexing of literary works should be incorporated into those eligible to benefit from fair use defence.

It is interesting to note that, like the conventional librarian, Google’s library digitalisation project aims to provide materials to end-users, i.e., copying for third parties. However, Google Library is not entitled to the library exemption discussed in Part 3.1.3. Firstly, the commercial nature of Google’s business prevents the project from claiming fair use defence. As a for-profit company, Google relies on the revenue from advertisements displayed on the book pages. Thus, the commercial purpose behind Google Library distinguishes Google from traditional libraries. Secondly, the nature of the Google online service makes it difficult to detect whether the end-user’s request is for “research or private study”.<sup>109</sup> Thirdly, as analysed in Part 3.1.3.,<sup>110</sup> relative legislations have confirmed that only physical libraries are allowed to make digital copies, which officially excludes online searching and indexing services.

Instead of seeking library exemption, Google claimed that its project was the “digital age equivalent of a card catalogue with every word in the publication indexed”<sup>111</sup> thus to be regarded as within the scope of fair use. In these cases, Google argued that there was no evidence for

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<sup>106</sup> See “Google Corporate Information: Company Overview”, available at, <http://www.google.com/corporate/>.

<sup>107</sup> See *The Author’s Guild v. Google*, No.05-CV-8136 (S.D.N.Y.) filed (Sep 20, 2005).

<sup>108</sup> See *McGraw-Hill Companies, Inc. v. Google*, No.05-CV-8881 (S.D.N.Y.) filed (Oct 19, 2005).

<sup>109</sup> See UK CDPA 1988 Section 38 (2) (a), and Section 39(2) (a).

<sup>110</sup> See Part 3.1.3, at 104.

<sup>111</sup> See e.g., Melanie Costantino, “Fairly Use: Why Google’s Book Project Should Prevail under the Fair Use Defense?” *Fordham Intellectual Property, Media and Entertainment Law Journal*, Vol.17 (2006) at 235-277. See also, Thomas E. Wilhelm, “Google Book Search: Fair Use or Fairly Useful Infringement?” *Rutgers Computer and Technology Law Journal*, Vol.33 (2006) at 107. See Hannibal Travis, “Google Book Search and Fair Use: iTunes for Authors, or Napster for Books?” *University of Miami Law Review*, Vol. 61 (2006).

negative impact on the potential market for original copyright works, given that Google had sufficiently transformed the use of the copyright works. Moreover, it is argued that rightsholders may potentially benefit from Google's search engine linking to their works.<sup>112</sup> The Google Library litigation was much debated among scholars within copyright law.

According to scholars, two divergent lines of case strategy might lead to alternative results in U.S. copyright law.<sup>113</sup> Some suggested that the trial court in New York may follow the *MP3.com* decision.<sup>114</sup> As noted in Part 3.2.2.1.<sup>115</sup>, copying the copyright content into the database was not a "fair use" and thus constituted copyright infringement. By contrast, Google responded that its copying might fall under fair use if the court was directed by *Kelly v. Arriba Soft*<sup>116</sup> decision. In *Kelly*, the defendant used a software spider to locate, store and index photographic images on the Internet. These images were reduced to "thumbnails"<sup>117</sup> and linked by an online searching service. The U.S. Court of Appeals for the Ninth Circuit acknowledged the commercial purposes of the defendant, but upheld the Arriba's use was "[a] transformative use of Kelly's images [which] promotes the goals of information dissemination and the fair use exception".<sup>118</sup> Similar discussion in favour of online searching and indexing services can be studied in the Ninth Circuit decision in *Perfect 10, Inc. v. Google, Inc.*<sup>119</sup>, where the Court found Google's service to be fair use, against the District Court's rule that use of thumbnails was copyright infringement.

However, a landmark deal has been achieved by Google and the Authors Guild and Association of American Publishers in October 2008, aiming to resolve a number of lawsuits in the last three years.<sup>120</sup> Under the terms of the settlement, in order to allow the availability of millions of copyright works through Google Book Search, Google will compensate authors and publishers

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<sup>112</sup> See *The Author's Guild v. Google*, No.05-CV-8136 (S.D.N.Y.) filed (Sep 20, 2005). See also, *McGraw-Hill Companies, Inc. v. Google*, No.05-CV-8881 (S.D.N.Y.) filed (Oct 19, 2005).

<sup>113</sup> See supra note 106.

<sup>114</sup> See e.g., Elisabeth Hanratty, "Google Library: Beyond Fair Use?" *Duke Law and Technology Review*, No.10 (2005).

<sup>115</sup> See Part 3.2.2.1, at 117.

<sup>116</sup> See *Kelly v. Arriba Soft*, 336 F 3d 811 (CA 9, 2003).

<sup>117</sup> Ibid.

<sup>118</sup> Ibid.

<sup>119</sup> See *Perfect 10, Inc. v. Google, Inc.*, 416 F. Supp. 2d 828 (C.D.Cal. 2006).

<sup>120</sup> See "Google Strikes Book Search Deal", *BBC NEWS* (Oct 31<sup>st</sup>, 2008) available at, <http://news.bbc.co.uk/1/hi/technology/7695507.stm>.

with \$125 million. It will also be responsible for establishing a non-profit Book Rights Registry to guarantee rightsholders receive compensation via subscription services or advertisement revenue. As to individual users, they will be allowed to preview up to 20 percent of a book and choose to purchase it as they wish.

The “biggest book deal on the U.S. publishing history”<sup>121</sup> may be a promising way to protect rightsholders’ interests in the context of digital file sharing. However, it is noteworthy that this settlement implies that Google has given up on the claim that its online copying activities should be protected by the fair use rights of end-users. In other words, fair use is disappearing from the Google Library scheme.

### ***3.2.3. The End of Fair Use in the Context of File Sharing?***

Taken together; the cases above indicate that file sharing systems are under legal duress for encouraging illegal copyright infringement in the context of *entertainment* — and as a result may disappear, go underground or be shunned by lawful users.

There exist two groups of defendants claiming fair use defence in lawsuits against file sharing systems. The first is the primary copyright infringer, namely the end-user of file sharing networks who uploads, downloads, and distributes copyright works without rightsholders’ permission. At this point it is important to define who “the primary infringer” is. Certain file sharing intermediaries such as *MP3.com* and *Google, Inc.*, as in above cases, may fall under the definition of the “primary infringer”, given that they perform the primary infringing activities on behalf of end-users. Considering the intermediary nature of such file sharing tool providers, however, I shall categorise these file sharing providers into the second group in this thesis, i.e., the file sharing intermediaries. Besides those file sharing intermediaries which make copies themselves for users who may have fair use rights, such as *MP3.com* and *Google, Inc.*, file sharing providers such as *Napster*, *Grokster* and *BitTorrent* have tried to exercise fair use defence for their end-users.

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<sup>121</sup> Ibid.

In the preceding cases, it is not in dispute that the Courts did not consider there might be an appropriate relationship between the end-users' conducts and the statute excuses that could be secured through fair use doctrine. The Courts did not look to apply the principle of fair use to certain file sharing end-users when reaching their determination. It should, however, be emphasised that this does not mean that a reasonable fair use of copyright works through file sharing networks does not exist. Just as Yen stated, "[I]n practice, ... people generally use [file sharing] technology to distribute any kind of computer [processed] unauthorised copies of copyrighted music and movies"<sup>122</sup>. Theoretically, however, "people could use [file sharing] technology to distribute any kind of computer file"<sup>123</sup>, including legally authorised works. For instance, file sharing network can be used by faculty, researchers and students to share research materials, classroom teaching notes and even their own thesis. What the Courts suggested, nevertheless, was that rightsholders "have established direct infringement of their copyright works by *some* end-users of [file sharing technology providers'] software"<sup>124</sup>. The relationship between "*(some) other* end-users" whose conducts fall within copyright limitations and the fair use doctrine has been, at this stage, set aside.

Secondly, the relationship between the file sharing intermediaries, i.e., the file sharing tool provider, and the fair use doctrine also posed a dilemma for the Courts. Two kinds of file sharing intermediaries, as identified in above cases, have been involved in the application of fair use defence to alleged copyright infringement. First, intermediaries whose users make the copies and may have defense of fair use, like *Napster*, *Grokster* and *BitTorrent*, act as contributory infringers for the direct infringement. The contributory infringer means "one[s] who, with *knowledge* of infringing activity, induce, cause or materially *contribute* to infringing conduct of another".<sup>125</sup> In theory, the contributory infringer should not be entitled to benefit

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<sup>122</sup> Alfred C. Yen, "Sony, Tort Doctrines, and the Puzzle of Peer-to-Peer", *Yen Case Western Draft of 2/03/05*, Boston College Law School Faculty Papers (2005) at 31. Available at, <http://lsr.nellco.org/bc/bclsfp/papers/31>.

<sup>123</sup> Ibid.

<sup>124</sup> See *Grokster*, supra note 3, at 10.

<sup>125</sup> See *Casella v. Morris*, 820 F.2d 362,365 (11<sup>th</sup> Cir. 1987), cited by *Sega Enterprises Ltd. v. Maphia and Frank Music v. CompuServe*, 857 F. Supp. 679 (N.D.Cal.1994) [Hereinafter, *Sega*, in brief]. In *Sega*, court issued preliminary injunction, finding prima facie case was established for contributory copyright infringement based on the operator's role in copying the video games "including provision of facilities, direction, knowledge and encouragement." Available at,

directly from the fair use defence, given that a fair “use” or “dealing” is normally recognised as a direct use made of a work<sup>126</sup>, and only related to the primary infringer. However, the technology providers as contributory infringers have aroused a number of arguments to justify the end-users’ activities from a technology perspective. For example, by granting that “home-shifting of [copyright] programs is legitimate fair use”,<sup>127</sup> *Sony* tried to apply fair use doctrine in this new area of technology. This time-shifting technology was held as fair use despite the fact that consumers were copying entire programs without the permission of copyright owners. With regard to fair use doctrine in the file sharing environment, the contributory infringer faces something more troublesome than any facts applied in the *Sony* home recorder case. The *Napster* court found that, different from “time-shifting” or “space-shifting” technology, the *Napster* P2P network is not a fair use because “the methods of shifting [in P2P networks] ... simultaneously involve distribution of the copyright material to the general public; ...[rather than] only to the original user”.<sup>128</sup> According to the Supreme Court decision in *Grokster*, a successful claim of “substantial non-infringing use” was trumped by the “inducement” doctrine. The principle embodied in *Grokster* and *BitTorrent* lawsuits shows that file sharing technology may not benefit from the fair use doctrine regardless of whether the file sharing network is a centralised or decentralised model.

The other file sharing intermediary sub-type involved in fair use defence are those appealing to fair use for their own primary infringing behaviour. *MP3.com* and *Google Library Project* are typical examples. Being the primary infringer, it is more plausible for file sharing service providers such as *MP3.com* to claim fair use protection. Detailing the reasons for such problems in file sharing environment, Dogan cites that some differences between home recorders and digital file sharers, such as nature of the works<sup>129</sup>, nature and scale of the copying<sup>130</sup>, privacy

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<http://www.unc.edu/courses/pre2000fall/law357c/cyberprojects/spring97/spliab/iptext.htm>.

<sup>126</sup> For instance, according to Section 107 of the U.S. Copyright Act of 1976, fair use is applied to “the use made of a work. See also, Section 28 (1) of CDPA describes fair dealing as “specify acts which may be done in relation to copyright”. See also, Bently, *Intellectual Property Law*, supra note 7, at 194. According to Bently, “it is important to note that all that is meant by dealing is that the defendant has made use of the work”.

<sup>127</sup> See *Sony*, supra note 39.

<sup>128</sup> See *Napster*, supra note 2, at 4239.

<sup>129</sup> Stacey L. Dogan, “Comment: Sony, Fair Use and File Sharing”, *Case Western Reserve Law Review*, Vol.55 (4) (2005). According to Dogan, unlike *Sony*, works shared on file sharing networks “are not works being picked up from a public broadcast, for watching at a later time”.

concerns<sup>131</sup>, and potential market harm<sup>132</sup> are of notable import in evaluating file sharers' fair use claims<sup>133</sup>. In spite of scholarly debates on the alternative legal results originating from different interpretations of fair use in file sharing systems, the latest dramatic settlement in *Google Library Project* lawsuits have highlighted the existence of uncertainty in applying fair use doctrine in the context of file sharing.

As discussed above, developments in file sharing technology have reduced the chances of using fair use defence by either end-users or file sharing intermediaries. On the one hand, the end-user has been identified as the direct copyright infringer by Courts, although still being mindful that there are a minority of end-users whose conducts fall within legitimate fair use. On the other hand, the file sharing intermediaries are sued, and the "fair use" defence is generally rejected. Thus the systems are closed down and become inaccessible even to legitimate "fair users". In short, traditional conditions on which fair use doctrine remains valid have withered away in the context of file sharing.

### 3.3. The Fair Use Problem in the Context of File Sharing Unveiled

Joseph Schumpeter states that the most "fundament impulse that sets and keeps the society engine in motion"<sup>134</sup> is not "competition regarding price, quality, and effort"<sup>135</sup>, but rather "creative destruction"<sup>136</sup>, a process "that incessantly revolutionises the economic and [social] structure [by] incessantly destroying the old one, incessantly creating a new one"<sup>137</sup>. In certain circumstances, the development of technologies which facilitate copying and the distribution of

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<sup>130</sup> See Dogan, *supra* note 129. Stacey pointed out that *Sony* technology supports individuals' ability to make single copies for their own personal use, while file sharing "involves a global, collaboration copying and distribution process among individuals who rarely know one another".

<sup>131</sup> See Dogan, *supra* note 129. Stacey stated that *Sony* technology is used in people's home, while P2P file sharing is being used among a large number of public facilities.

<sup>132</sup> See Dogan, *supra* note 129. The *Sony* Court did not prove that *Betamax* harmed the copyright owners' market, in contrast, the *Napster* was found to harm both existing and potential copyright markets.

<sup>133</sup> See Dogan, *supra* note 129.

<sup>134</sup> See Joseph A. Schumpeter, *Capitalism, Socialism, and Democracy*, Harper Perennial Publisher (1976) at 84. See also, Raymond Shih Ray Ku, "Consumers and Creative Destruction: Fair Use beyond Market Failure", *Berkeley Technology Law Journal*, Vol. 2 (2003) at 26.

<sup>135</sup> *Ibid.*

<sup>136</sup> *Ibid.*

<sup>137</sup> *Ibid.*

copyright works can lead to much creative destruction within the copyright system. For instance, the creation of new technologies such as the photocopier and VCR has already altered copyright legislation and practice. In this respect, Internet technology, especially file sharing systems, is crucial for copyright system revolution in the age of new media, given its specific technical characteristics. In the following, I will emphasise how sharing copyright works through file sharing systems has introduced a state of uncertainty into the previously relatively stable balance between social benefit and rightsholders' interest in the traditional copyright environment.

### **3.3.1. Destruction of “Purpose” for Fair Use**

The specific technical design for information exchange via file sharing networks, i.e., the data flow form of resource swapping, especially in an anonymous way, causes problems in detecting the real purpose and character behind use of copyright works. It is relatively straightforward to confirm that a student's photocopying of an article in library is to assist his classroom studying or essay writing, which activity falls within fair use domain. In contrast, when copyright works are distributed as bits and bytes through file sharing networks, the massive copying facilitated by anonymous duplication and distribution tends to be less probable to be counted as fair use on an individual end file-sharer basis.

A notable feature of fair use doctrine is that the dealing must be fair for proper purpose, whether it is a purpose specifically listed in copyright legislations, for example, UK copyright law<sup>138</sup> defines fair dealing for limited purposes as in research or private study<sup>139</sup>, criticism or review<sup>140</sup>, or the reporting of current events<sup>141</sup>; or it falls within open-ended purposes, which is allowed under US copyright law<sup>142</sup>. The fact that it may be impracticable for Courts to detect the real purpose of a use of copyrighted work as distributed in file sharing networks is a threat to fair use dependant on a fair purpose.

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<sup>138</sup> See UK CDPA 1988.

<sup>139</sup> See Section 29 of CDPA 1988.

<sup>140</sup> See Section 30 of CDPA 1988.

<sup>141</sup> See Section 30 of CDPA 1988.

<sup>142</sup> See Section 107 of the U.S. Copyright Act of 1976.



### 3.3.2. Destruction of “Private” Use

According to its definition in *Collins Concise Dictionary* (1997), the word “private” refers to “not widely or publicly known”, “confidential”, or “not for general or public use”.<sup>143</sup> This term as incorporated in fair use doctrine connotes that the use of the copyright works is not for general or public purposes.

The digital environment has greatly changed the role of end-users accessing copyright works. For instance, a user can keep his conduct “private” if he just photocopies one chapter from an entire book for his own research and study purpose. However, in the digital milieu he becomes a distributor when he downloads or uploads the chapter through file sharing networks. As Gervais remarks, the traditional “end-users” now enter a classification as “intermediaries” by re-disseminating the content within file sharing networks.<sup>144</sup> Private use in the file sharing networks no longer equates to “private” in a conventional sense.

In the copyright sense, the intermediary role of file sharing network users, in most cases, impacts negatively on copyright protection, as it is then placed beyond the domain of fair use. This is especially so in some countries, such as Canada, whose copyright legislations admit private copying to be fair use. For instance, in *CCH v. Law Society of Upper Canada*,<sup>145</sup> the court addressed that “the fair dealing exception ... is open to those who can show that their dealings with a copyrighted work were for the purpose of research or private study. ... ‘Research’ must be given a large and liberal interpretation in order to ensure that users’ rights are not unduly constrained. ... [As a result,] research is not limited to non-commercial or private context”. Nevertheless, in the context of file sharing where any “private” copying is capable of leading to a “public” dissemination, re-examining and reconsidering the definition of “private” has proved necessary.

### 3.3.3. Destruction of “Middlemen”

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<sup>143</sup> See *Collins Concise Dictionary*, Glasgow: Harper Collins Publishers, 3<sup>rd</sup> ed. (1997) at 1064.

<sup>144</sup> See Gervais, *Towards a New Core International Copyright Norm*, supra note 38, at 1.

<sup>145</sup> See *CCH v. Law Society of Upper Canada* [2004] SCC 13 (Canada).

As discussed in Part 2.2.1.2.<sup>146</sup>, file sharing technology separates authors' incentives to creation from the recording industry and also other content distributors' incentives. File sharing separates the end users' capacity to distribute copyrighted files from the entertainment industry. Instead of the entertainment industry distributing copyright works, the consuming public can now distribute digital content from one end-PC to another directly through file sharing networks, without need for middlemen. In this sense, file sharing threatens "the very foundation of a business model based upon distributing content to the public"<sup>147</sup>, rendering the entertainment industry and other content distributors potentially redundant.

Without the capability of distributing copyrighted content within file sharing networks, the entertainment industry, as one of the most important rightsholder groups, have lost control over third party consumers who wish to make use of copyrighted digital content. As such, licensing as an effective strategy for conventional copyright industries is threatened. Although automated rights management (ARM) and digital rights management (DRM) provide rightsholders with a way to control their works with digital defensive mechanisms, such as firewalls, encryption, and passwords, a large number of end-users are still able to freely access copyright works without authentication through file sharing networks. Thus, rightsholders in the entertainment industry are under threat in the context of file sharing, on the ground that "online access has replaced distribution (of copies) with licensing".<sup>148</sup>

### **3.3.4. Destruction of "Market" Interests**

One's willingness to purchase copyright content would certainly be influenced by the chance of obtaining it at no extra cost<sup>149</sup>. File sharing, therefore, is a serious threat, breaking the traditional copyright market. The technical characteristics of file sharing networks offer a large number of end-users the opportunity to upload, download, copy and distribute copyrighted content without properly compensating copyright owners, hence it can be assumed that rightsholders' revenue

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<sup>146</sup> See Part 2.2.1.2, at 66-70.

<sup>147</sup> See Wendy J. Gordon, "Fair Use as Market Failure: A Structural and Economic Analysis of the Betamax Case and Its Predecessors", *Columbia Law Review*, Vol. 82 (1982) at 28.

<sup>148</sup> See Gervais, *Towards a New Core International Copyright Norm*, supra note 38, at 27.

<sup>149</sup> See Gordon, supra note 147, at 28.

loss in turn will result in market imbalance. Ku states that, “[a]s the costs of copying decrease and more individuals are able to afford the technology necessary to copy, one can assume that there will be a greater number of potential copiers. So even though the copying costs for the initial distributors will decrease as well, they will be forced to compete with a greater number of copiers and copies”.<sup>150</sup>

A probability tool known as “*The Long Tail Theory*” can be applied to prove rightsholders’ market interests loss in the context of file sharing. This was first mentioned by Chris Anderson in an essay named “The Long Tail”<sup>151</sup> which described certain business and market models such as Netflix<sup>152</sup> and Amazon.com distributing to a low-frequency or low-amplitude population. The long tail theory realises that traditional media offers most resource control and profits to a small cluster of entities, following the popular Pareto Principle<sup>153</sup> which states that 80% of resources and profits are attained by 20% of major entertainment industries. However, the “long tail”, under certain circumstances, can “collectively make up a market share that rivals or exceeds the relatively few current bestsellers and blockbusters”<sup>154</sup>, if the distribution is large enough. This is especially so, given that the Internet technology which provides end-users with more facilities to attend to market activities is at present full of vitality. As Anderson says, “[t]he theory of the Long Tail is that our culture and economy is increasingly shifting away from focusing on a relatively small number of “hits” (mainstream products and markets) at the head of the demand curve and toward a huge number of niches in the tail. ... [,] especially online...”<sup>155</sup>

File sharing practice conforms to the long tail theory. The basic technical characteristics of digital resource swapping make information exchange quicker, cheaper and more convenient. In

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<sup>150</sup> See Raymond Shih Ray Ku, “The Creative Destruction of Copyright: Napster and the New Economics of Digital Technology”, *University of Chicago Law Review*, Vol. 69 (2002) at 296-297.

<sup>151</sup> See Chris Anderson, *The Long Tail: Why the Future Business is Selling Less of More*, Hyperion Press (2006). See also, Chris Anderson, *The Long Tail How Endless Choice Is Creating Unlimited Demand*, Random House (2007).

<sup>152</sup> “Netflix”, an online DVD rental service which offers over 60,000 DVDs, including many unpopular movies and TV series, etc... Available at, <http://www.netflix.com/Default>.

<sup>153</sup> “Pareto’s principle” is also known as the 80-20 rule, which states that 80 percent of the work is performed by 20 percent of the employees; or that 80 percent of the wealth is held by 20 percent of the population. See Alan Rushton, *Handbook of Logistics and Distribution Management*, Kogan Page Press, 2<sup>nd</sup> ed. (2001).

<sup>154</sup> See Chris Anderson, “The Zen of Jeff Bezos”, *Wired*, Vol. 166 (January, 2005).

<sup>155</sup> Ibid.

the digital world, “private use” no longer exists — traditional users of copyright works are also “intermediaries” who re-disseminate the content.<sup>156</sup> Many of the new “intermediaries”<sup>157</sup>, as the entertainment industry worried, have competitively threatened the established market and entertainment businesses. Jessica Litman states that, “[digital] file trading has so far proved to be a far more effective distribution mechanism for a broader range of music, but is even worse than the conventional system at compensating creators”.<sup>158</sup> The unsuccessful compensating system stemming from file sharing technology in turn causes an imbalance between social benefit and right holders’ market interest in facilitating fair use doctrine.

Although the idea that the market interest loss as a consequence of the file sharing is part of the reason that fair use doctrine has shrunk in the entertainment file sharing circumstances, it is necessary to emphasise that different situations may be encountered when regulating research and educational file sharing. As discussed in Chapter 5, a voluntary system which only compensates rightsholders in non-pecuniary terms has been proved to be possible in the context of research and educational file sharing, given the fact that the academic authors’ expectation for rewards is more focused on the academic value being imposed on their works by other scholars.<sup>159</sup>

### 3.4. Conclusion

The technical design of file sharing systems has greatly changed the way people share information. Considering the potential benefits which researchers and educational users may obtain from accessing file sharing systems, applying fair use doctrine into file sharing circumstances is strongly desirable. The case studies above have described how fair use defence has struggled along in file sharing legal practice, and demonstrated that parties who are entitled to fair use in traditional copyright environment have been progressively losing the benefit of fair

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<sup>156</sup> See Daniel J. Gervais, *supra* note 38,

<sup>157</sup> See, e.g., The Ninth Circuit Court provided the figures that in 1999 approximately 10,000 music files were “shared” per second using Napster and more than 100 users attempted to log onto the Napster server every second. Napster’s popularity was 75 million users by the end of 2000. See, *Napster*, *supra* note 2.

<sup>158</sup> See Jessica Litman, “Sharing and Stealing” (2003) available at, <http://www.quicktopic.com/25/D/cD8dwc52A3p.html>.

<sup>159</sup> See Chapter 5, 5.4.4., at 218.

use in the context of file sharing. This leads to a need for consideration of alternatives to apply conventional fair use doctrine to new technological circumstances.

To discover effective alternatives, the basic reasons that fair use doctrine has shrunk in the context of file sharing may be useful to ascertain. Specifically, the basic way for information exchange employed, i.e., the data flow form of resource swapping, especially in an anonymous form, causes troubles in detecting the real purpose and character for the use of the copyrighted work. Private use in the file sharing networks, more importantly, no longer keeps “private” in a traditional sense. The digital environment has influenced the role of users in accessing copyright protected works. Traditional “end-users” have extended their roles to function as “intermediaries” by re-disseminating content.<sup>160</sup> Thus, the development of file sharing technology has de-constructed the traditional conditions which fair use doctrine relies on, resulting in some loss of market interests for rightsholders. We can therefore imagine that when rightsholders’ statutory rights fall beyond control, applying exceptions or limitations to such rights such as the fair use doctrine in practice might well be questioned.

If, as discussed above, the essential of fair use —balance between the public interest and the rightsholders’ benefit —having been altered in the context of file sharing, how can the existing fair use legal system be improved? Is there a solution to rebuild another balanced system in digital file sharing? The following Part will explore ways which may be helpful to re-introduce fair use doctrine into research and educational file sharing by analysing solutions being adopted in contemporary entertainment file sharing and academic file sharing practice.

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<sup>160</sup> Ibid.

## Part III Alternative Methods of Guaranteeing Fair Use for Educational Users in File Sharing

As demonstrated in previous chapters, the issue of applying fair use/fair dealing in the context of file sharing is controversial. Scholars and politicians have presented a number of possible solutions to the conflict surrounding fair use/fair dealing doctrine. This Part critically examines three proposed solutions to the fair use dilemma in the context of file sharing, with each categorised according to the source of compensation for rightsholders. These comprise “the public model”, “the private model”, and “the voluntary model”.

Within this text, “the public model” refers to those approaches which involve state or public regulation<sup>1</sup>. Under such a scheme, the government implements a tax or levy system on purchases of recordable media, in exchange for permission to allow private copying. The German pre-2008 experience is an example of a public levy. By comparison, in “the private model”, compensation for rightsholders is collected via private contracts. The best-known current example of the private model is Apple’s iTunes subscription scheme<sup>2</sup>. Finally, there is the voluntary model, where authors simply give away their copyright content for free, or at most for non-monetary compensation by obtaining insubstantial benefits such as reaching a larger audience, or enjoying greater prestige. Contemporary open license movements, such as Open Access to Knowledge (A2K) and Creative Commons (CC), are examples of the voluntary

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<sup>1</sup> To date, the government-involved approach has been discussed in different jurisdictions. For example, Jörg, Reinbothe, “Compensation for Private Taping Under Sec 53(5) of the German Copyright Act”, *International Review of Industrial Property and Copyright Law*, Vol.12 (1981) at 36. See also, Ernest A. Seemann, “Sound and Video-Recording and the Copyright Law: The German Approach”, *Cardozo Arts and Entertainment Law Journal*, Vol.2 (1983) at 225. Thomas Dreier, “Copyright Law and Digital Exploitation of Works: The Current Copyright Landscape in the Age of the Internet and Multimedia” (1997) available at, <http://library.fes.de/fulltext/stabsabteilung/00218toc.htm>. Don E Tomlinson and Timothy Nielander, “Red Apples and Green Persimmons: A Comparative Analysis of Audio Home-Recording Royalty Laws in the United States and Abroad”, *Mississippi College Law Review*, Vol. 20 (1999) at 5. See, “Economic Impact Study: Private Copying Levies on Digital Equipment and Media in Europe”, *Report Commissioned by Business Software Alliance* (2003) at 3.

<sup>2</sup> See iTunes’s Store Term of Service, available at, <http://www.apple.com/legal/itunes/us/service.html>. (access at Jan 15, 2008). See also, Napster Terms and Conditions, available at, <http://www.napster.com/terms.html> (April 10, 2008).

model.

By focusing on the advantages and limitations of each model in Chapters 4 and 5, I evaluate that the current public model and private models may not be appropriate for digital file sharing practice for academic or educational purposes. In comparison, I suggest that the voluntary model is a possible solution, given emphasis on its potential to serve academic consumers.

## **Chapter 4. Current “Fared” Use Models in the Context of File Sharing**

Since *Napster* emerged in 1999, file sharing has become an intractable topical issue in entertainment practice. This Chapter analyses the “fared” use models, i.e., the public and private model approaches deployed by the entertainment industry when file sharing made collecting revenues for rightsholders problematic. I shall evaluate the advantages and limitations of these two models. Attention will, in particular, be drawn to the inappropriateness of these models within academic and/or educational file sharing practice.

### **4.1 The Public Model: Levies, Taxes or Tariffs**

The public model, also known as “levies”, “taxes” or “tariffs” collected on file sharing goods and services, has been used in practice for decades to facilitate the evolution of new media technology. It is defined as “a form of compensation for rightsholders based on the premise that an act of private copying cannot be licensed for practical reasons and thus causes economic harm to the relevant rightsholders”.<sup>3</sup> A distinction between “levy” and “tax” can be based on who collects the accumulated funds; taxes are collected by a government, while levies are received by a private body, such as a copyright collecting society, and examples of the way they function will be discussed in detail in this chapter.

#### ***4.1.1 History of the Public Model***

The system of copyright levies for private copying was initiated in the 1950s in certain (mainly continental) legal systems, with the advent of sound recording equipment, enabling the public to

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<sup>3</sup> See European Commission, “Background Document: Fair Compensation for Acts of Private Copying”, Brussels (Feb 14, 2008).



copy copyright protected works easily and cheaply. Following the development of this technology, a landmark case in Germany — *GEMA v. Grundig*<sup>4</sup> (GEMA) — established a principle that private copying activity is “not beyond ... exclusive recording rights”<sup>5</sup> and that the copyrightsholder is entitled to reasonable remuneration “from the manufacturers of such recording equipment for the losses incurred through the private copying undertaken by users of such equipment”<sup>6</sup>. In 1965 a German Copyright Act, *Urheberrechtsgesetz* (UrhG)<sup>7</sup> introduced the world’s first statutory licence and levy for private copying in article 53<sup>8</sup>. Based on the German court decision and the 1965 German Copyright Act, the European Union’s Directive on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society (2001/29/EC) requires that member states ensure “fair compensation” to rightsholders for copies made by means of digital recording equipment.<sup>9</sup> The incentives to alleviate the digital threat to existing copyright system have stimulated many countries, including most continental European Countries<sup>10</sup>, to settle inclusively for individual non-commercial uses of copyright works, on condition that levy or tax compensations are imposed for that purpose. For example, a blank media levy was introduced to the Canadian Copyright Act 1997, which

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<sup>4</sup> See *GEMA v. Grundig*, Decision of May 18, 1955, I ZR 8/54, 17 BGHZ 266; 1955 GRUR 492. See also, *GEMA* Supreme Court decision of May 29, 1964, BGHZ 42M118M GYRY 1965M 104. (Since *GEMA v. Grundig*, Germany created “the most comprehensive” levies on the sale of audio and video recording equipment and media, copying equipment, as well as general purpose home computers.)

<sup>5</sup> See *Economic Impact Study*, supra note 1, at 6.

<sup>6</sup> Ibid.

<sup>7</sup> See *Copyright Law (Urheberrechtsgesetz, UrhG)*, 9 September 1965, last amended on 8 May 1998. Available at, <http://www.iuscomp.org/gla/statutes/UrhG.htm>.

<sup>8</sup> Ibid.

<sup>9</sup> According to Article 5(2)(b) of Directive 2001/29/EC, Member States may provide for an exception on private copying. It states, “in respect of reproductions on any medium made by a natural person for private ends that are neither directly or indirectly commercial, on condition that the rightsholders receive fair compensation which takes account of the application or non-application of technological measures referred to in Article 6 to the work or other subject matter concerned”.

<sup>10</sup> According to EU Consultant Paper on Fair Compensation for Acts of Private Copying, “22 out of the 27 Member States in EU have imposed private copying levies on manufacturers, importers or distributors of analogue or digital equipment or media that allows consumers to copy”, supra note 3. See also, Neil Weinstock Netanel, “Impose a Noncommercial Use Levy to Allow Free P2P File-Swapping and Remixing” (2002) available at, [http://www.utdallas.edu/~liebowit/knowledge\\_goods/netanal%20levy.pdf](http://www.utdallas.edu/~liebowit/knowledge_goods/netanal%20levy.pdf). See also, Glynn S. Lunney Jr., “The Death of Copyright: Digital Technology, Private Copying, and the Digital Millennium Copyright Act”, *Virginia Law Review*, Vol. 87 (2003) at 853. (Lunney listed private copying levy provisions of European Union countries in the article). See also, P.Bernt Hugenholtz, Lucia Guibault, and Sjoerd van Geffen, “The Future of Levies in a Digital Environment”, *The Final Report of IVIR* (2003) available at, <http://www.ivir.nl/publications/other/DRM&levies-report.pdf>. Peter K. Yu, “An Introduction to the EU Information Society Directive”, *Gigalaw.com* (2001) available at, <http://gigalaw.com/articles/2001-all/2001-11-all.html>.

imposes levies on “blank audio recording media”<sup>11</sup>, such as CD-ROMs. Finland’s blank media tax is one of the highest, which charges €0.50/min for audio tapes, €0.50/min for digital audio players to a maximum of €15 and €0.76/min for personal video recorders to a maximum of €15.<sup>12</sup> To date, there are at least 42 countries which have a remuneration scheme for private copying; on the other hand, some other EC countries such as the United Kingdom, Ireland, Malta, Cyprus and Luxembourg do not have levies or taxes of this kind.

#### ***4.1.2 Academic Proposals for Introducing the Public Model to Compensation for File Sharing***

A number of academics have proposed ways of implementing taxes, levies or tariffs on P2P file sharing goods and services to compensate rightsholders. For example, Neil Netanel suggested imposing a noncommercial use levy on P2P file swapping and remixing. As he stated, “[T]he levy ... would be imposed on the sale of any consumer product or service whose value is substantially enhanced by P2P file sharing”<sup>13</sup>, such as Internet access, P2P software and services, computer hardware, consumer electronic devices (e.g., CD burners, MP3 players, and digital video recorders) used to copy, store, transmit, or perform downloaded files, and storage media (like blank CDs) used with those devices. In exchange for imposing a noncommercial use levy, copyright law would “provide copyright immunity for individuals’ noncommercial copying and

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<sup>11</sup> See Section 82 of *Canadian Copyright Act 1997* states that,  
“(1) Every person who, for the purpose of trade, manufactures a blank audio recording medium in Canada or imports a blank audio recording medium into Canada  
(a) is liable, subject to subsection (2) and section 86, to pay a levy to the collecting body on selling or otherwise disposing of those blank audio recording media in Canada; and  
(b) shall, in accordance with subsection 83(8), keep statements of account of the activities referred to in paragraph (a), as well as of exports of those blank audio recording media, and shall furnish those statements to the collecting body.  
(2) No levy is payable where it is a term of the sale or other disposition of the blank audio recording medium that the medium is to be exported from Canada, and it is exported from Canada”.  
Canada’s current levies are as follows: \$0.29 per unit for Audio Cassette tape (40min or longer); \$0.77 per unit for CD-R Audio, CD-RW-Audio & MiniDisc; \$0.21 per unit for CD-R, CD-RW (non-audio). Canada also imposes a levy of “\$15 on portable MP3 players with up to 10GB of non-removable memory and \$25 on devices with more capacity”. See, Copyright Board of Canada, “Private Copying 2003-2004”, at 56, available at, <http://www.cb-cba.gc.ca/decisions/c12122003-b.pdf>.

<sup>12</sup> See “Private Copying Levy”, *Ikookies.com*, available at, <http://www.ikookies.com/limitations-and-exceptions-to-copyright/private-copying-levy.html>.

<sup>13</sup> See Netanel, *supra* note 10.

distribution of any expressive content that the copyrightsholder has previously released to the public”<sup>14</sup>. Additionally, individuals’ noncommercial derivative creation of such content would also be given immunity, provided “the derivative creator clearly identifies the underlying work and indicates that it has been modified”<sup>15</sup>.

In the book “*Promises to Keep*”, Fisher provides a “governmentally administered reward model”<sup>16</sup> to make restitution for damage to rightsholders. In his system, a creator who wishes to collect revenue for usage of his copyright works needs register the work with the Copyright Office<sup>17</sup>. With registration, the digital copy of work would be assigned “a unique file name, which would be used to track transmissions of digital copies of the work”<sup>18</sup>. Through taxes or levies on purchasing digital recordable audio or visual-audio media, the government would thus collect money to compensate registrants for permitting the public to access their works. Using techniques pioneered by American and European performing rights organisations and television rating services, a government agency would estimate the frequency with which each song and film was heard or watched by consumers. Each registrant would then periodically be paid by the agency a share of the tax revenues proportional to the relative popularity of his or her creation<sup>19</sup>. According to Fisher, “[o]nce this system were in place, we would modify copyright law so as to eliminate most of the current prohibitions on unauthorised reproduction, distribution, adaptation, and performance of audio and video recordings. Music and films would thus be readily available, legally, for free”<sup>20</sup>.

In the article “*The Death of Copyright: Digital Technology, Private Copying, and the Digital Millennium Copyright Act*”, Glynn Lunney discusses the private copying levy provisions of European Union countries, and argues that a levy should be imposed on devices and digital

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<sup>14</sup> See Netanel, *supra* note 10.

<sup>15</sup> See Netanel, *supra* note 10.

<sup>16</sup> See William W. Fisher, *Promises to Keep: Technology, Law and the Future of Entertainment*, California: Stanford Law and Politics Press, 1<sup>st</sup> ed. (2004) at 202.

<sup>17</sup> *Ibid.*

<sup>18</sup> *Ibid.*

<sup>19</sup> *Ibid.*

<sup>20</sup> *Ibid.*

exchange media to solve the problems resulting from private digital copying<sup>21</sup>. Given the development of Internet subscription services, Raymond Shih Ray Ku also suggests that the government should collect statutory levies on Internet service subscriptions and sales of computers as well as audio and video equipment.<sup>22</sup>

However, there are academic critiques focusing on these public models. Some scholars argue that private copying levies may not generate sufficient compensation to rightsholders. For instance, by arguing that setting prices and revenues in an arbitrary manner may lead to market failures, such as an unreasonable royalty rate leading to insufficient compensation for right holders, Liebowitz<sup>23</sup> argues questioningly around the difficulties in setting sufficient levels on the levies or taxes. Others contend that intellectual property is similar to real property so that rightsholders should have total control over the use of their works. As Lionel<sup>24</sup> suggests, the application of DRM and ISPs makes it possible for users to be charged for downloaded works at rates established by the rightsholders themselves. Other drawbacks of a levy system, such as inequitable cross-subsidisation<sup>25</sup> and distribution complexities<sup>26</sup>, have also been highlighted. These academic concerns regarding the public model, as discussed in 4.1.4 below, have emerged in digital file sharing practice.

#### **4.1.3 The Public Model Practice**

Levy and tax schemes which can be applied to file sharing have been broadly adopted in

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<sup>21</sup> See Glynn S. Lunney Jr, *supra* note 10, at 853.

<sup>22</sup> See Raymond Shih Ray Ku, "The Creative Destruction of Copyright: Napster and the New Economic of Digital Technology", *University of Chicago Law Review*, Vol. 69 (2002) at 311-322.

<sup>23</sup> See S. J. Liebowitz, "Alternative Copyright Systems: The Problems with a Compulsory License", *IP Central Review*, Vol.1 (2) (2004).

<sup>24</sup> See Lionel S. Sobel, "DRM as an Enabler of Business Models: ISP as Digital Retailer" (2003) available at, <https://www.law.berkeley.edu/institutes/bclt/drm/papers/sobel-drm-btlj2003.html>

<sup>25</sup> See, e.g., Neil Netanel argues that, "The low-volume users subsidy problem is somewhat overstated, however. For one, many low-volume users will happily pay a surcharge for the possibility of unlimited file sharing even if they do not actually engage in much file sharing. After all, consumers regularly buy computers with far more memory and processing capacity than they actually use ... Further, imposing the levy will encourage some low-volume users to become high-volume users..." See, Netanel, *supra* note 10, at 67-74.

<sup>26</sup> See, e.g., Adrian Sterling states that Collecting Societies have been put into a monopoly position, where they have a position of sole responsibility for the exercise of rights in particular areas. See, J.A.L Sterling, *World Copyright Law*, London: Sweet & Maxwell, 2<sup>nd</sup> ed. (2003) at 504.

continental European countries. By contrast, such schemes are rare in Anglo-American common law systems. Indeed, the current situation is polarised — at one extreme, countries like Germany include the statutory licence and levy “as a matter of law”<sup>27</sup> in their copyright law systems<sup>28</sup>; while at the opposite end, there have been no reform provisions introduced into some legislation such as UK copyright law yet.<sup>29</sup> It is noteworthy that a middle ground solution, which allows remedies for limited private copying activities in certain circumstances while adopting a broader “fair use” exception to private copying, has emerged, as exemplified by US copyright law. The following examines the legal background to the public model, and comprises a comparative study of the way in which the public levy model has permeated within three systems, namely Germany, the United Kingdom, and the United States.

#### **4.1.3.1. Private Copying Exceptions in General: International and Regional Level**

The legality of the public levy model is closely related to national legislations, and also modified by a series of international instruments and regional directives. Hence it is useful to revisit the provisions for public levies embodied in these conventions. Generally speaking, the most relevant provisions in this context are the so-called private copying exceptions.

The idea of establishing a general rule for countries to institute permitted exceptions and limitations to authors’ exclusive rights originated from the Report of the Swedish/ BIRPI Study Group 1964<sup>30</sup>. This suggested “if a provision on the subject [of not making the Berne Convention to be an anomaly] is to be incorporated in the text of the Convention, a satisfactory

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<sup>27</sup> See Andrew F. Christie, “Private Copying License and Levy Schemes: Resolving the Paradox of Civilian and Common Law Approaches”, *Legal Studies Research Paper*, No. 116 (2004) available at, <http://ssrn.com/abstract=690521>, at 6.

<sup>28</sup> There are at least 42 countries which adopt private copying schemes, such as Belgium, Canada, Denmark, Finland, France, Greece, Italy, Japan, Romania, Spain, Sweden, Switzerland, and so on. See, Gillian Davies and Michele Hung, *Music and Private Copying: An International Survey of the Problem and the Law*, London: Sweet & Maxwell (2001).

<sup>29</sup> In the European Union, there are still three member states, i.e., the United Kingdom, Ireland and Luxembourg, who have no current plan to adopt the private copying levy scheme.

<sup>30</sup> See Swedish/BIRPI Study Group Report in 1964, (amended in 1965), DA/22/2, at 47.

formula will have to be found for the inevitable exceptions to this [reproduction] right”<sup>31</sup>, given the fact that “exceptions that might restrict the [economic or practically important] possibilities open to the authors ...are unacceptable”, as well as “[many] national legislations [had] already contain[ed] a series of exceptions,... and that it would be vain to suppose that states would ... do away with these exceptions to any appreciable extent”<sup>32</sup>. Eventually, the Berne Convention accepted the following text as Article 9 (2) of the Stockholm Act in 1967:

*(2) It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author.*

Following the Berne Convention, a model known as the “three-step test” has been adopted and used in the TRIPs Agreement<sup>33</sup>, the WIPO Copyright Treaty (WCT) 1996<sup>34</sup>, and the WIPO Performances and Phonograms Treaty 1996 (WPPT)<sup>35</sup>. The detailed analysis of such “three-step test” in Chapter 2<sup>36</sup> indicates that the legislative technique has been to sanction copying for private use in certain special cases, provided the use does not “conflict with a normal exploitation of the work” or “does not unreasonably prejudice the legitimate interests of the author”. Article 15(1) of the Rome Convention<sup>37</sup> also allows contracting States to provide for exceptions to “private use” in their domestic laws and regulations.

At regional level, the task of deciding on limitations and exceptions to be permitted for private copying has also been carried out. The Council of the European Union, the European Parliament and the Commission have been working together, in order to reach EU-wide harmonising legislation on the issue of private copying. The 1988 *Green Paper on copyright and the challenge of technology*<sup>38</sup> was the first step in EU legislation, driving the harmonisation of

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<sup>31</sup> Ibid.

<sup>32</sup> Ibid.

<sup>33</sup> See Article 13 of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs).

<sup>34</sup> See Article 10(1) of WIPO Copyright Treaty (WCT) 1996.

<sup>35</sup> See Article 16 of WIPO Performances and Phonograms Treaty (WPPT) 1996.

<sup>36</sup> See Chapter 2, Part 2.3.2, at 81.

<sup>37</sup> See Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organisations (Rome Convention) 1961.

<sup>38</sup> See Green Paper on Copyright and the Challenge of Technology – Problems in Copyright Calling

national laws on private copying in this digital information age. The Commission paper states that commercial piracy greatly harms the EU internal market, and notes the need to promote harmonising national laws on private copying in order to deal with technological change. The *Green Paper on copyright and related rights in the information society*<sup>39</sup> in 1995 emphasises that levies may deliver as a partial cure for market failure and individual piracy in the Internet context. In 1999, the EU Parliament proposed a new subsection concerning digital home copying, which states “a natural person was only to reproduce digital works for private and purely personal use, ... [and] solely for non-commercial purposes”.<sup>40</sup> Article 5(2) (b) of the EU Copyright Directive 2001/29/EC was a significant step towards harmonising the “private copying exception” in the European Union. Article 5(2)(b) provides an option for the EU Member States to adopt copyright exceptions to the reproduction right on condition that copying is for non-commercial “private use” and the rightsholders can receive “fair compensation”. It is interesting to note that the EU Commission issued *Communication from the Commission to the European Economic and Social Committee on the Management of Copyright and Related Rights in the Internal Market*<sup>41</sup> in 2004 which highlights deficiency in the current compensatory systems for private copying online by emphasising the need to make the levy collecting procedure “more transparent, accountable, flexible and efficient”<sup>42</sup>. Since 2005, a series of consultations on copying levy reform have been included in the EC Work Program.<sup>43</sup> A questionnaire on “*Copyright levies in a converging world*”<sup>44</sup> and a *Follow-up consultation to stakeholders*<sup>45</sup> was submitted for public consultation between March 2005 and July 2006 to ensure that later Commission proposals were technically viable, practically workable and based

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for Immediate Action, COM (1988) 172.

<sup>39</sup> See Green Paper on Copyright and Related Rights in the Information Society, COM (1995) 382, final.

<sup>40</sup> See Proposal for a European Parliament and Council Directive on the harmonization of certain aspects of copyright and related rights in the information society, COM (1997) 0628 (O.J. 1998 C 108/6)

<sup>41</sup> See Communication from the Commission to the European Economic and Social Committee on the management of copyright and related rights in the internal market, COM (2004) 261.

<sup>42</sup> Ibid.

<sup>43</sup> See the EC Proposal: Fair Compensation for Private Copying: copyright levies reform, 2006/MARKT/08 (2006).

<sup>44</sup> See Stakeholder Consultation on copyright levies in a converging world (O.J. 2006 C 297/10) (2006).

<sup>45</sup> See The Follow-up Stakeholder Consultation on copyright levies in a converging world (June 6, 2006 – July 14, 2006).

on a bottom-up approach. On 14 February 2008, the European Commission re-launched a new consultation process on “*Fair Compensation for Acts of Private Copying*”,<sup>46</sup> aiming to demonstrate whether a common approach between all stakeholders can be developed.

#### **4.1.3.2. National Levy Schemes on Private Copying**

At national level, countries are entitled to decide whether or not, and, if so, in which form and to what extent their particular legal framework imposes a public levy system on private copying. When looking at the growth of public levy schemes throughout the world, it is apparent that the majority of them are in civil law countries. The analysis of data collected in the European digital media and equipment market reveals that the total amount collected by this levy scheme on digital equipment and services has increased nearly threefold by 2006 compared to the data in 2002<sup>47</sup>.

##### ***4.1.3.2.1. The Public Levy Permitted As a Matter of Law: The German pre-2008 Statutory Licence and Levy Scheme***

In order to analyse public levy practice in continental European copyright systems it is useful to start with the German copyright levy scheme, which was the first statutory licence and levy scheme in the world, namely, the *Urheberrechtsgesetz Copyright Act (UrhG)* in 1965. Prior to 1965, non-commercial private copying was permitted as an exception or limitation to copyright law in Germany. Article 15(2) of the *Gesetz betreffend das Urheberrecht and Werken der Literatur und der Tonkunst 1901 (LUG)* authorised “copying for private use ... in cases where the purpose [was] not to gain income from the work”.<sup>48</sup> German Parliament justified article 15,

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<sup>46</sup> See Background Document on Fair Compensation for Acts of Private Copying, supra note 3.

<sup>47</sup> The Report of Rightscom for the Business Software Alliance reveals that levies collected on digital equipment and media totaled €309.39m in 2002, while it increased to €542.04m in 2004 and €860.92m in 2006. See *Economic Impact Study*, supra note 1, at 3.

<sup>48</sup> See *Gesetz betreffend das Urheberrecht and Werken der Literatur und der Tonkunst 1901 (LUG)*, Reichsgesetz, (1. Januar 1902). Article 15 states, “Eine Vervielfältigung ohne Einwilligung des Berechtigten ist unzulässig, gleichviel durch welches Verfahren sie bewirkt wird; auch begründet es keinen Unterschied, ob das Werk in einem oder in mehreren Exemplaren vervielfältigt wird. Eine Vervielfältigung zum persönlichen Gebrauch ist zulässig, wenn sie nicht den Zweck hat, aus dem Werke eine Einnahme zu erzielen”.



stating “an individual’s private sphere must be free from claims of copyright infringement”<sup>49</sup>. Nevertheless, the substantial threat to rightsholders’ interests caused by the development of audio-tape recorders opened “an enormous pair of sluice-gates”<sup>50</sup> to private copying.

The German statutory licence and levy system was initially rooted in two cases, where the German Collecting Society for Musical Performing and Mechanical Reproduction Rights (GEMA) commenced lawsuits against the manufacturers and retailers of tape recorder machines. *GEMA v. Grundig* (1954)<sup>51</sup> was one of the earliest cases to recognise the manufacturers’ liability in selling the equipment, which can be used for both legal and illegal copying activities. In *GEMA v. Grundig* (1954), the Supreme Court observed that “it is irreconcilable with copyright law principles to assume that the protection of the private sphere plainly prohibits payment for his creation from accruing to the author when the use of the work happens in the private sphere”<sup>52</sup>, even if “within the privacy of one’s home no one [might] injure the authors’ interests in personality rights, diminishing his rights of recognition or alter the author’s work”<sup>53</sup>. The decision emphasised that “the individual enjoyment of the work”<sup>54</sup> constitutes the internal justification of the copyrightsholder’s right of remuneration, no matter whether the enjoyment occurs in the public or in the domestic domain. As a result, the Court made a decision about the “GEMA notice”<sup>55</sup> in 1960, stating that “neutral advertising”<sup>56</sup> was not sufficient for manufacturers of recorders to avoid copyright liability. Instead, they should be required to enter into a licensing agreement with GEMA, in order to possess an exemption from the GEMA-notice.

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See also, Katerina Gaita and Andrew F. Christie, “Principle or Compromise? Understanding the Original Thinking Behind Statutory Licence and Levy Schemes for Private Copying”, *Intellectual Property Quarterly*, Vol. 8 (2004) at 442-447.

<sup>49</sup> See Gaita and Christie, *supra* note 48, at 446. See also, Ernest A. Seemann, *Sound and Video-Recording and the Copyright Law: The German Approach*, *supra* note 1, at 244.

<sup>50</sup> Quoted in J. H. Spoor, W. R. Cornish and P. F. Nolan, *Copies in Copyright* (1980). As quoted by Gaita and Christie, *supra* note 48, at 447.

<sup>51</sup> See *GEMA v. Grundig*, 1 ZR 8/54, 17 BGHZ 266, 271,272, [1955] GRUR 492. *supra* note 4.

<sup>52</sup> *Ibid*, at 280.

<sup>53</sup> *Ibid*, at 275.

<sup>54</sup> *Ibid*, at 278.

<sup>55</sup> A “GEMA-notice” here originates from the Court decision, which ordered Grundig not to sell its equipment which can be used for both legal and illegal copying, without reference to possible copyright infringement in their advertisement and instruction.

<sup>56</sup> See Decision of 22 January 1960, GRUR 1960, at 340.

The other significant case is *GEMA's* 1964<sup>57</sup> lawsuit, which involved a retailer of tape recorder machines. In *GEMA 1964*, the plaintiff requested the retailers limit their customers to those who presented legal identification that they had signed a license with GEMA. The Supreme Court decided that GEMA's claims conflicted with the inviolability of the home guaranteed in the German Constitution<sup>58</sup>, and suggested that GEMA might have an action against "the manufacturer of the equipment, which knowingly aided and abetted their customers' infringement of copyright".<sup>59</sup> Following the Court's decision, the Judiciary Committee of the German Parliament proposed imposing a levy on producers of recording equipment in 1964, given the fact that they "took express advantage of the popularity of home taping ... and aided and abetted it".<sup>60</sup> Since the levy scheme was officially enacted in the Copyright Act 1965, the Urheberrechtsgesetz (UrhG), Germany has imposed a series of private copying levies, requiring a payment of a statutory levy on digital media, including blank audio and audiovisual recording media and devices, such as printers, blank CDs and DVDs, CD burners as well as personal computers (PCs)<sup>61</sup>. For example, the detailed rate of levies applied in 2006 is listed as follows:

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<sup>57</sup> See Urteil des Bundesgerichtshofs vom 29. Mai 1964 – Aktz: Ib ZR 4/63, reproduced in GRUR 02/1965, cited in Guibault, n32, at 7.

<sup>58</sup> See Article 13 of the German Constitution, (This article declared that the possibility of using neighbours, doormen, etc, was supposed to be regarded as informants). See also, Ernest A. Seemann, *supra* note 49, at 239.

<sup>59</sup> See Gaita and Christie, *supra* note 48, at 422-427. See also, Ernest A. Seemann, *supra* note 49, at 243, 246.

<sup>60</sup> See Jörg, Reinbothe, *supra* note 1, at 40.

<sup>61</sup> See, e.g., The District Court of Munich decided that the private copying levy covered personal computers in 2004. See Rik Lambers, "German PC Levy", *Constitutional Code Blog*, (Dec 2004), available at, <http://constitutionalcode.blogspot.com/2004/12/german-pc-levy.html>. The Court in Stuttgart asserted that the levy applied to computer printers in 2005. See also, Rik Lambers, "German Court Confirms Printer Levy", *Constitutional Code Blog*, (Dec 2004), available at, <http://constitutionalcode.blogspot.com/2005/05/german-court-confirms-printer-levy.html>.

<b>Media</b>	<b>Cost/Data</b>	<b>Cost/Time</b>
Audio Cassettes (60 minutes)		€ 0.0614/hr
VHS Cassettes (180 minutes)		€ 0.087/hr
DVD-R		€ 0.174/disc
DVD+R		€ 0.174/disc
DVD-RW		€ 0.174/disc
DVD+RW		€ 0.174/disc
Audio CD-R RW		€ 0.0614/hr
MiniDisc		€ 0.0614/hr
Data CD-R		(30% of) € 0.072/hr
Data CD-RW		(30% of) € 0.072/hr
DVD		€ 0.174/disc
<b>Equipment</b>	<b>Cost</b>	
<b>Published Rate</b>		<b>Negotiated Rate (BITKOM)</b>
Cassette Recorder	€ 1.28/unit	
VHS Recorder	€ 9.21/unit	
Audio CD Recorders	€ 1.28/unit	
MP3 Player Flash	€ 2.56/unit	
MP3 Player HDD	€ 2.56/unit	
Integrated CD-R RW Writers	€ 7.50/unit	€ 6.00/unit
Combo Drives	€ 7.50/unit	€ 6.00/unit
Integrated DVD Writers	€ 9.21/unit	€ 7.37/unit
DVD Recorders	€ 9.21/unit	€ 7.37/unit
Set top Box	€ 18.42/unit	€ 12.00/unit

**Figure 1.** *Detailed Rate on Digital Media and Equipment in Germany in 2006*<sup>62</sup>

Although such a public levy scheme is still in force today in many continental countries, such as Austria, Belgium, Netherlands, Spain and Sweden, it is noteworthy to mention that the latest copyright law amendment dramatically alters the statutory private copying levy system in the German Copyright Act. In July 2007, the Lower House of the German Federal Parliament (*Bundestag*) passed a new copyright amendment bill. Following approval by the Upper House, a

<sup>62</sup> See “Levies Collection Study: Market Value of Private Copying Levies on Digital Equipment and Media in Europe”, *Copyright-Levies-Reform*, Alliance (2006) available at, [http://eicta.org/fileadmin/user\\_upload/document/document1162909464.pdf](http://eicta.org/fileadmin/user_upload/document/document1162909464.pdf), at 56.

new copyright law came into effect on January 1, 2008. This provides a new scheme to compensate rightsholders. According to the amendment, the amount of compensation should be negotiated between the collecting societies and the manufactures directly, different from the previous statutory remuneration in which the amount of compensation was determined in a detailed attachment to the Copyright Act. The rationale of the German copyright reform is to comply with the inflexibility resulting from the rapidity of technological developments.

### *Understanding the Rationale and Principle behind the Public Levy Scheme*

The evolution of the public levy scheme clarifies that the public way model was a pragmatic solution to the dilemma between the development of technology and the spread of private copying. Statutory licence and levy models have been broadly accepted in continental European countries for years, while few such schemes exists in common law. We will consider the original pathway of the public levy/tax scheme, in order to explore the rationale and principle underneath the public way model.

Compared to the Anglo-American common law copyright system which emphasises “owners’ rights”<sup>63</sup>, the continental European copyright system is founded on the primary purpose of protecting “authors’ rights”<sup>64</sup>, a fact succinctly highlighted by the phrase “natural rights”. The notion of natural rights originates from Lockean’s labour theory, which was used to justify the remuneration for authors in the GEMA case. According to *GEMA*<sup>65</sup>, the basis of natural rights is related to the author’s personality which is also reflected in his works. Hence, copyright exists so that the author is capable of controlling the uses to which his or her work is put. In other words, “[T]he author’s control of his work ... results from its very own nature ... and merely finds

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<sup>63</sup> See Christie, *Private Copying Licence and Levy Schemes*, supra note 27, at 3-4. See also, Sam Ricketson and Christopher Creswell, *The Law of Intellectual Property: Copyright, Designs and Confidential Information*, Australia: Lawbook Co. (1999). See, David Lindsay, “The Law and Economics of Copyright, Contract and Mass Market Licenses”, *Center for Copyright Study Ltd.* (2002) available at, [http://www.copyright.com.au/reports%20&%20papers/IssuesPaper\\_Lindsay.pdf](http://www.copyright.com.au/reports%20&%20papers/IssuesPaper_Lindsay.pdf).

<sup>64</sup> See Kevin Garnett, Gillan Davis and Gwilym Harbottle, *Copinger and Skone James on Copyright*, 15<sup>th</sup> ed, Thomson, London: Sweet & Maxwell, Vol.I (2005) at 29. See also, Manfred Rehbinder, *Urheberrecht*, Verlag C.H.Beck, Vol.13., neu bearbeitete Auflage, 2004, XIII, 488 Seiten. See also, Sam Ricketson and Christopher Creswell, supra note 63, at 6.

<sup>65</sup> See *GEMA v. Grundig*, supra note 4.

recognition and form through legislation”<sup>66</sup>.

The “just remuneration”<sup>67</sup> principle based on natural rights has also been embodied in current copyright legislation. For instance, article 11 of the UrhG claims that “[c]opyright protects the author with respect to his intellectual and personal relationship with his work, and also with respect to utilisation of his work. At the same time, it serves to secure a reasonable remuneration for the use of that work”. Article 26 and 27 of UrhG also allows for remuneration of authors for exploitation of their work out of their control, or where there are exemptions from copyright law for the purpose of public interests, such as a *droite de suite*<sup>68</sup>, a right of remuneration for rental and lending<sup>69</sup> and a remuneration for reproduction and distribution in religious and educational uses<sup>70</sup>.

However, the basis of the public levy model reflects not only on the fruit of one’s labour. The *GEMA* decision impelled the public levy scheme to look beyond an entitlement to “[the author’s] creative act”<sup>71</sup>. The GEMA Court recognised that:

*The main idea recognised in copyright judicial rulings and literature, [i.e.,] the author is entitled to the economic fruits which derive from his work, only constitutes a minimum requirement for the protection of the material [rewards for] the author and is tailored to the system which dominates in copyright law of the commercial relaying of works. This idea does not [include another fact] that the author does receive [non-monetary or moral] remuneration when [the work is valued and cherished] without direct economic compensation.*<sup>72</sup>

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<sup>66</sup> See *GEMA v. Grundig*, supra note 4.

<sup>67</sup> See J. H. Spoor and Herman Cohen Jehoram, *Copies in Copyright*, Kluwer Law International Publishers (2002) at 25. In the beginning of 20<sup>th</sup> century, Josef Kohler developed the Lockean theory to the immaterial nature of a work. He agreed that authors’ intellectual labours gain a natural right over the works, but he also suggested that “incorporeal goods are so utterly different from corporeal ones that they cannot be subject of a kind of ownership but only of a right sui generis, the immaterial property right”. Thus so, Kohler posited a general right of “just remuneration”.

<sup>68</sup> UrhG, article 26.

<sup>69</sup> UrhG, article 27.

<sup>70</sup> UrhG, article 46.

<sup>71</sup> See *GEMA v. Grundig*, supra note 4, at 278.

<sup>72</sup> See *GEMA v. Grundig*, supra note 4, at 282.

Thus, the GEMA decision highlighted another issue entitling the author to just remuneration on the grounds that the remuneration right also springs from the “very enjoyment by the individual users of the author’s work”<sup>73</sup>. Gaita and Christie<sup>74</sup> assert that the individual user’s “enjoyment” as derived from the author’s work forms “a debt to the author for the fulfillment of their appetite for art”<sup>75</sup>. In other words, private copying activity is, to some degree, similar to a receiver’s “wrong done” to the author when the author provides his work as an offering, i.e., the offering indebts the receiver to the author.<sup>76</sup>

The above analysis demonstrates that the essential principle of the public way model in continental European countries not only lies in the author’s creative behaviour, but also stems from “a debt of gratitude owed to the author”<sup>77</sup> by individual users of the work for their enjoyment derived from using the work. In summary, the author’s labour in the work and the user’s enjoyment from the work justify the application of public levies in continental European copyright systems.

#### **4.1.3.2.2. The Public Levy Not Accepted: The Special Case of the United Kingdom**

Compared to civilian law countries which emphasises authors’ natural rights and users’ wrong done to the author, most common law systems, such as the UK and US copyright laws, give primacy to the utilitarian basis for copyright protection. In the utilitarian view, copyright is a solution to deal with market failure, previously discussed in Chapter 2. Given this rationale for copyright, we would expect that the public levy scheme might be widely adopted by common law countries to solve the economic problems caused by private copying. However, the use of the public way model in common law copyright regimes is most uncommon.

Despite recommendations to the Government in favour of such a scheme, the public levy/tax

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<sup>73</sup> See *GEMA v. Grundig*, supra note 4, at 282. (Translated by Katerina Gaita and Andrew F. Christie. See, Gaita and Christie. *Principle or Compromise?* Supra note 48.

<sup>74</sup> See Gaita and Christie. *Principle or Compromise?* Supra note 48.

<sup>75</sup> See Gaita and Christie. *Principle or Compromise?* Supra note 48.

<sup>76</sup> See Gaita and Christie. *Principle or Compromise?* Supra note 48.

<sup>77</sup> See *GEMA v. Grundig*, supra note 4, at 278.

model has not been introduced in the UK so far. In 1985, a discussion paper<sup>78</sup> was submitted to the British Parliament by the Secretary of State for Trade and Industry, suggesting a blank tape levy on audio and video tapes. Similar recommendations were presented by the Government's White Paper on Intellectual Property and Innovation<sup>79</sup> again in 1986. However, these propositions have not been enacted largely due to pressure exerted by tape manufacturers and consumer groups<sup>80</sup>.

The UK copyright system permits limited exceptions to rightsholders' exclusive rights. In general, the specific purposes of a fair dealing behaviour are related to research and private study<sup>81</sup>, criticism, review and news reports<sup>82</sup>, and incidental inclusion of copyright material<sup>83</sup>. These exceptions do not, however, grant a general right to make copies for private use. Thus, there are no provisions in current UK copyright law for private copies in theory, nor a public levy to fund it. The rightsholders are still entitled in principle to receive compensation for private use of their works, but only if they can identify whether, and by whom the private copying has occurred, and can effectively sue those who do so. But given that private copying is difficult to detect, especially in the context of digital file sharing, where massive copying is facilitated by anonymous duplication and is distributed as bits and bytes through networks, there is, in effect, no remuneration for private copying in UK copyright practice.

It is noteworthy that there is a concern, presently, that the UK exceptions are too narrow to protect the public interest in the context of new technology. Recommendation 8 of *Gowers Review of Intellectual Property* suggests "introduc[ing] a limited private copying exception by 2008 for format shifting for works published after the date that the law comes into effect,"<sup>84</sup> on the grounds that the lack of a private copying exception in the UK makes it difficult for the

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<sup>78</sup> See *The Recording and Rental of Audio and Video Copyright Material: A consultative document*, London: HMSO (1985)

<sup>79</sup> See Government's White Paper on intellectual property and innovation, London: HMSO (April, 1986).

<sup>80</sup> See "UK Government Locks European Levy", *Music and Copyright*, Vol. 2 (1992) at 5.

<sup>81</sup> See Copyright, Design and Patent Act (CDPA) 1988, section 29.

<sup>82</sup> Ibid, section 30.

<sup>83</sup> Ibid, section 31.

<sup>84</sup> See *Gowers Review of Intellectual Property*, published with the permission of HM Treasury on behalf of the Controller of Her Majesty's Stationery Office, TSO (Dec 2006).

British public to realise that their format shifting music behaviour, such as copying music from a CD legitimately purchased onto a computer or MP3 player, is prohibited under the law. As stated by the BPI, “[W]e now need to make a clear and public distinction between [‘]for your own use[‘] and copying for dissemination to third parties”<sup>85</sup>. It is also interesting to note that the Review believes it is possible to create a “limited private copying exception”<sup>86</sup> without a copyright levy. According to the Review, rightsholders may collect pecuniary remedy by setting up a sale price which includes the economic cost of a limited private right to copy<sup>87</sup>. However, setting up an adequate sale price in practice would be complicated. The arguments in favour of such a solution are still inconclusive.

#### ***4.1.3.2.3. The Middle Ground Solution: The United States Case Study***

The private copying scheme in the United States is unique. Generally speaking, statutory levies on blank audio or video recording media have not been applied in the U.S., but rightsholders are entitled to receive remuneration in some circumstances under the Audio Home Recording Act of 1992 (AHRA).

In practice, the popularity of audio recording in the late 1980s initiated a debate on the legal status of digital home recording. On the one hand, the rightsholders contended that audio home recording significantly harmed their market benefits. On the other hand, digital audio technology providers argued that the development of digital recording devices required “a sufficient degree of certainty that contributory infringement proceedings would not be brought”.<sup>88</sup> Thus, the judicial dilemma of the audio home recording dispute would be whether digital audio home recording fell within the scope of fair use doctrine, whether the recording should be remunerated, and whether the technology should be promoted. Elkman and Christie

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<sup>85</sup> See Evidence from BPI to House of Commons Select Committee for Culture, Media and Sport Inquiry into New Media and the Creative Industries. (Quoted from *Gowers Review of Intellectual Property*, at 62). See “The BPI Announcement to House of Commons Select Committee for Culture, Media and Sport Inquiry into New Media and the Creative Industries” (June 2006).

<sup>86</sup> Ibid.

<sup>87</sup> Ibid.

<sup>88</sup> See Saba Elkman and Andrew F. Christie, “A Negotiated Solution to Audio Home Recording? Lessons from the US Audio Home Recording Act of 1992”, The University of Melbourne Faculty of Law, *Legal Studies Research Paper*, No. 103 (2004) at 125.



pointed out,

*(1) If audio home recording was regarded as a fair use, the use of the technology “would not have been remunerated” and the distribution of the technology “would not have been restrained”;*

*(2) If audio home recording was not regarded as a fair use, the use of the technology “may have been remunerated via ongoing royalties or an award of damages” and the distribution of the technology “may have been restrained by injunction”.*<sup>89</sup>

In response to these conflicting points, the US Congress enacted the Audio Home Recordings Act (AHRA) in 1992<sup>90</sup>. The AHRA aims to solve the contravention by taking a “middle ground” path, namely, a way granting users a ‘right’ to engage in audio home recording<sup>91</sup>, while imposing a monetary *compensation* through a compulsory royalty<sup>92</sup> in place of an injunction on the digital audio recording technology.<sup>93</sup>

Firstly, the AHRA confers upon consumers an audio home recording “right”. Section 1008 of the AHRA allows use “based on the non-commercial use by a consumer for making digital ...or analog musical recordings”.<sup>94</sup> Secondly, the “right” is not equal to fair use defence; instead it requires compensatory royalties for rightsholders’ monetary losses be imposed on digital hardware and blank digital media manufacturers and importers.<sup>95</sup> According to Section 1003 and 1004 of the Act, the amount of payment “shall be 2 percent and 3 percent of the transfer price. ... Only the first person to manufacture and distribute or import and distribute such device shall be required to pay the royalty with respect to such device”. Thirdly, Section 1002 prohibits copyright infringing actions based on “the manufacture, importation, or distribution of a digital audio recording device, a digital audio recording medium, and analog recording device,

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<sup>89</sup> Ibid, at 129.

<sup>90</sup> See the U.S. Audio Home Recordings Act of 1992, No. 102-563, 106 Statute 4247 (codified in Title 17 of the U.S. Copyright Act). [Hereinafter, *Audio Home Recording Act (1992)*, in brief].

<sup>91</sup> See *Audio Home Recording Act (1992)*, 17 USC §1008.

<sup>92</sup> See *Audio Home Recording Act (1992)*, 17 USC §1003, 1004.

<sup>93</sup> See *Audio Home Recording Act (1992)*, 17 USC §1002.

<sup>94</sup> See *Audio Home Recording Act (1992)*, 17 USC §1008.

<sup>95</sup> See *Audio Home Recording Act (1992)*, 17 USC §1003, 1004.

or an analog recording medium, or based on ... non-commercial use by a consumer of such a device or medium for making digital...or analog musical recordings”<sup>96</sup>.

The levy conferred by the AHRA is very *limited*. For example, §1001 (4)(A) distinguishes “digital audio recording medium” from “digital audio recording device”. The former refers to a material object “that is primarily marketed or most commonly used by concerns for the purpose of making digital audio copied recordings by use of a digital audio recording device”, while the latter is defined as the machine “be[ing] designed or marketed for the primary purpose of making a digital audio copied recording for private use”. The AHRA is in favour of applying a levy on the digital audio recording *medium* but fails to be so in respect of digital audio recording *devices*.

The AHRA resolution embodies three elements, i.e., granting a non-fair use right to use audio home recording, collecting remuneration for the loss resulting from audio home recording, and promoting lawful distribution of digital audio recorders. However, it is noteworthy that the fair use exception grants a broader right to make private copies. Based on fair use doctrine, there is no copyright infringement as long as the copying activity falls within fair use. On the contrary, if the private copying behaviour is not fair use, then it does infringe the rightsholder’s rights, and accordingly the rightsholder deserves certain compensation, either in the monetary or non-pecuniary terms.

Compared to the UK fair dealing doctrine which is defined in a limited manner through a non-exhaustive list of situations where the “dealing” with a copyright work is permitted while also leaving some room for judicial interpretation to justify the “fairness” of the use, the fair use approach in the U.S. means that the use of a copyright work is a fair use only if “the court is satisfied that the use is fair”.<sup>97</sup> This broader “fair use” exception has given rise to extensive litigation. For example, in *Fortnightly Corp. v. United Artists Television, Inc.*<sup>98</sup>, the United States

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<sup>96</sup> See *Audio Home Recording Act (1992)*, 17 USC §1002.

<sup>97</sup> See Lionel Bently and Brad Sherman, *Intellectual Property Law*, New York: Oxford University Press Inc., 3<sup>rd</sup> ed. (2003) at 194.

<sup>98</sup> See *Fortnightly Corp. v. United Artists Television, Inc.*, 392 U.S. 390 (1968).

Supreme Court determined that the cable industry operators were not “public performers” given that cable retransmission “ha[d] the ability to select, procure, and propagate programs to the public by broadcast or rebroadcast”. As a result, the Court granted rightsholders permission to require compensation from the cable operators. *Fortnightly* was reaffirmed in *Teleprompter Corp. v. Columbia Broadcasting System, Inc*<sup>99</sup> in 1974. § 111 Title 17<sup>100</sup> of the United States Code officially confirms that the cable operators can re-transmit over-the-air broadcast signals, on condition that they compensate rightsholders by paying statutory royalties. These royalties paid by cable operators can, to some degree, counterbalance the rightsholders’ interests with the cable operators’ benefits.

In short, the U.S. public model may be seen as a “middle ground” model, in so far as it is different from either the Germany pre-2008 statutory levy model covering potentially all private copying activities; or the UK fair dealing model which leaves private copying to a case-by-case judicial interpretation without accepting public levy or taxes. The limited levy scheme in the U.S. copyright law reflects the consensus within the Congress, which integrates fair use doctrine with remuneration for rightsholders and the lawful distribution of audio home recorders.

#### ***4.1.4 Evaluating the Public Model***

##### **4.1.4.1. Advantages of the Public Model**

The public levy model, from the evidence above, is economically and legally both viable and practical. *Economically*, the scheme has afforded an opportunity for rightsholders to receive compensation without having to pursue elusive private home users. This increases the likelihood of rightsholders collecting their justified monetary reward in a digital environment while allowing users non-commercial access to copyright works. *Legally*, allowing private copying in certain circumstances will improve the clarity of the copyright law system. As *Gowers Review of*

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<sup>99</sup> See *Teleprompter Corp. v. Columbia Broadcasting System, Inc.*, 415 U.S. 394 (1974).

<sup>100</sup> See § 111, Title 17, U.S. Code Collection.

*Intellectual Property*<sup>101</sup> research demonstrates, a public levy might help to “make a clear and public distinction between copying for your own use and copying for dissemination to third parties”<sup>102</sup>, and thus “make it clear to consumers”<sup>103</sup> that they are entitled to copy music for their own private use by moving the music from one format to another.

#### **4.1.4.2. Disadvantages Existing in the Public Model: From 1965 to Digital File Sharing**

Generally speaking, substantial drawbacks exist with the levy system: difficulty in determining the royalty pool; frustration of “low-volume” users<sup>104</sup>; curtailment of “fair use” privileges; and, most importantly, the troublesome mechanism of collecting and fairly distributing remuneration.

*Firstly*, there is no uniform standard about which digital recording media and devices are subject to public levies. For instance, current German private copying levies require payment of a levy on blank audio and audiovisual recording media and devices, such as printers, blank CDs and DVDs, and CD burners as well as PCs. By comparison, the French code de la propriété intellectuelle (The French Intellectual Property Code) permits the levy to be applied to both blank recording media and Internet audio equipment.<sup>105</sup> A Dutch Court recently rejected calls for a music levy on USB Flash drives,<sup>106</sup> while Canada’s Private Copyright Collective (CPCC) has been trying to force a copyright tax on Secure Digital card (SD), MultiMediaCard (MMC), Memory Stick and other digital memory formats.<sup>107</sup> The various standards may have a negative

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<sup>101</sup> See *Gowers*, supra note 84.

<sup>102</sup> See *BPI Announcement*, supra note 86.

<sup>103</sup> See *BPI Announcement*, supra note 86.

<sup>104</sup> See, Netanel, supra note 10, at 62-77.

<sup>105</sup> See Article L.122-5 (2) and Article L. 211-3(2) of the French Intellectual Property Code.

<sup>106</sup> A Dutch industry group, SONT, proposed a tax two years ago on USB flash drives sold in the Netherlands. In order to obtain remedies for artists whose music would possibly be unlawfully used via the flash drive, SONT requested a € 0.05 levy per USB flash drive, and also proposed a levy variously based on storage capacity. Naturally the Netherlands’ largest consumer organisation Consumentenbond protested calling the tax proposal bizarre. On 13<sup>th</sup> March 2007, Dutch justice minister Hirsch Ballin rejected the SONT’s proposal. Available at, [http://www.everythingusb.com/dutch\\_usb\\_tax\\_12129.html](http://www.everythingusb.com/dutch_usb_tax_12129.html).

<sup>107</sup> In December 2003, a copyright tax was imposed on digital music players by the Canadian Copyright Board, in order to compensate artists for revenue lost to “private copying”. The Copyright Board argued they contain recording media, specifically Flash memory and hard drives. The proposal was challenged by retailers. As a result, Mr. Justice Marc Noël ruled the law did not explicitly include digital music players’ memory and hard drives among its list of recording media in December 2004. The CPCC, which distributes to artists and publishers cash collected by the Copyright Board,

impact on international copyright cooperation. This is especially relevant, given that cross-border collective management of copyright is at present recognised as one possible direction for collecting societies in the digital age.<sup>108</sup>

*Secondly*, it is unclear whether the tariff collected would be sufficient to compensate rightsholders. The development of technology has had a constructive impact on digital playback devices, creating ever cheaper devices with larger memory capacity. For example, a 50GB portable hard drive is capable of storing more than 9,000 tracks<sup>109</sup>, which enables consumers to store around 600 CD albums. With a typical broadband connection speed up to 50Mbit/sec, a typical device could transfer 20 MP3 songs per second. How much levy should be imposed on the manufacturer of this device? If the levy is too onerous, say £10,000, customers will be deterred from purchasing this device, in likely consequence damaging the device manufacturer's interests. On the contrary, if the levy is set too low, it is unlikely to collect sufficient compensation for rightsholders. Generally speaking, royalties are not set by law but by negotiation between the rightsholder and the user. The pre-determined royalty rate in the public levy system at this point may not satisfy any party, i.e., rightsholders, users or the device manufacturers.

*Thirdly*, a levy system may penalise certain users "who rarely use networks"<sup>110</sup>, namely, low-volume users, by subsidising high-volume users. Some scholars claim that the low-volume users' subsidy problem may be overstated. For example, Netanel states that, "[F]or one, many low-volume users will happily pay a surcharge for the possibility of unlimited file sharing even if they do not actually engage in much file sharing. After all, consumers regularly buy computers with far more memory and processing capacity than they actually use ... Further, imposing the

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submitted a new plea for an iPod tax to the Board in Feb 2007. The current tariff expires on 31 December 2007, so it's looking to get MP3 players added to the list from 2008 onwards. Available at, [http://www.reghardware.co.uk/2007/02/12/canada\\_ponders\\_ipod\\_tax\\_again/](http://www.reghardware.co.uk/2007/02/12/canada_ponders_ipod_tax_again/).

<sup>108</sup> See "Study on a Community Initiative on the cross-border collective management of copyright", *Commission working document of the EC*, Brussels (July 7, 2005).

<sup>109</sup> See the online survey done by *Last.fm*, available at, [http://www.last.fm/group/Taking+Drugs+to+Make+Music+to+Take+Drugs+to/forum/20184/\\_/177469/2](http://www.last.fm/group/Taking+Drugs+to+Make+Music+to+Take+Drugs+to/forum/20184/_/177469/2).

<sup>110</sup> See Neil Weinstock Netanel, *supra* note 10.

levy will encourage some low-volume users to become high-volume users....”<sup>111</sup> Nevertheless, some others argue that, “[f]rom the users’ point of view, ‘all you can eat’ is not necessarily the best formula, at least not for those whose diet of copyright works is modest”<sup>112</sup>.

*Fourthly*, with a levy-based model private copying generally becomes legitimate, which may lead to a loss of control of their works by rightsholders. On the one hand, “[the] generalisation of the levy technique could lead to an even greater feeling on consumers’ part that they are entitled to copy and ‘share’ anything they want”.<sup>113</sup> As Glynn S. Lunney expresses, a levy system “move[s] private copying from the margins into the mainstream, converting private copying from a minor annoyance into a major threat to copyright revenues”<sup>114</sup>. Conversely, the levy-based system “would create a licensing culture that assumes everything should be licensed”<sup>115</sup> on the basis that “responsibility for setting prices would no longer reside with rightsholders alone, subject only to the market; the government and equipment manufacturers would also play a central role”<sup>116</sup>. The licensing culture growing in parallel with the public levy model requires every user to pay for his use of copyright work, no matter whether the use is “fair” or not.

*Finally*, but most importantly, the public levy scheme leads to difficulties in collecting and fairly distributing remuneration. Towards analysing issues surrounding levy collection and distribution problem, the copyright collecting society as a topic deserves particular attention. Copyright collecting societies are agencies acting on behalf of rightsholders, which negotiate licences and collect and usually distribute royalties to the owners. In the non-digital world, collecting societies have evolved to meet this need, primarily in civilian systems. From the viewpoint of the rightsholder, collecting societies serve them by achieving what they cannot practically and economically manage for themselves, i.e. enforcement and administration of their rights. As for

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<sup>111</sup> See Neil Weinstock Natenel, *supra* note 10, at 67-74..

<sup>112</sup> See Jane C. Geinsburg, “Copyright and Control Over New Technologies of Dissemination,” *Columbia Law Review*, Vol.101 (5) (2001).

<sup>113</sup> See Evan P. Schultz, “Jane Says”, *IP Law and Business* (2003) at 24.

<sup>114</sup> See Glynn S. Lunney Jr., *The Death of Copyright*, *supra* note 10, at 710.

<sup>115</sup> See Peter K. Yu, “P2P and the Future of Private Copying”, Michigan State University College of Law, *Legal Studies Research Paper Series*, Research Paper No. 02-08 (2004) at 45, available at, <http://ssrn.com/abstract=578568>.

<sup>116</sup> See Glynn S. Lunney Jr., *The Death of Copyright*, *supra* note 10, at 710.

users, the collecting societies provide a service by facilitating access to copyright works and thereby make it possible for users to comply with their obligations under the law to obtain licences for the use of copyright works<sup>117</sup>. Generally speaking, the principal role of all collecting societies is<sup>118</sup> - 'to licence the use of the copyrights they manage; to monitor that use in order to enforce the conditions upon which the licence has been granted; and to collect and distribute the royalties payable as the result of licensed use'<sup>119</sup>.

Since the first copyright collecting society for creators and publishers, the Societe des Auteurs, Compositeurs et Editeurs de Musique (SACEM), was established in France in 1851, the idea of setting up an organisation "which manages or administers copyright or rights related to copyright as its sole purpose or as one of its main purposes"<sup>120</sup> has been followed internationally. "Collecting society" has been defined by the European Union (EU) as "any organisation which manages or administers copyright or rights related to copyright as its sole purpose or as one of its main purposes".<sup>121</sup> The EU document *Follow-up to the Green Paper (1991)*<sup>122</sup> issued by the Commission of the European Community (The Commission) first introduced the subject of the collective management of copyright to the European Community (EC). The EU Green Paper in 1995<sup>123</sup> emphasised concerns about "the acquisition and management of copyright collective rights and technical systems of identification and protection, having regard particularly to new multimedia works and the exploitation of works on digital networks"<sup>124</sup>. A follow-up paper

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<sup>117</sup> See Kevin Garnett, Gillian Davies and Gwilym Harbottle, *Copinger & Skone James on Copyright*, supra note 64, at 28-04.

<sup>118</sup> See Fry Robin, "Copyright Infringement and Collective Enforcement", *E.I.P.R.*, Vol.24 (11) (2002) at 516-524.

<sup>119</sup> See Kevin Garnett, Gillian Davies and Gwilym Harbottle, *Copinger & Skone James on Copyright*, supra note 64, at 28-04.

<sup>120</sup> See the definition of collecting societies given by the EU, *Satellite and Cable Directive 93/83*, Art. 1(4). See also, the U.K CDPA 1988 defines the term as "A 'licensing body' means a society or other organisation which has as its main object, or one of its main objects, the negotiation or granting, either as owner or prospective owner of copyright as agent for him, of copyright licences, and whose objects include the granting of licences covering works of more than one author".

<sup>121</sup> See The EC Directive on Copyright, Satellite Broadcasting and Cable Retransmission, EC Directive 93/83/EEC (O.J. 1993 L. 248/6), Article 1(4).

<sup>122</sup> See Follow-up to the Green Paper: Working Programme of the Commission in the field of copyright and neighboring rights, Commission Communication to the Council, document COM (90) 584 final, Brussels (January 17, 1991).

<sup>123</sup> See Green Paper on Copyright and Related Rights in the Information Society, Brussels, COM (95) 382 final (July 19, 1995).

<sup>124</sup> Ibid.

issued in 1996<sup>125</sup> identified the structure and management of collective management rights<sup>126</sup>, and revealed management of rights as a “Single Market” policy requiring further evaluation<sup>127</sup>. Discussion continued through a series of EU conferences impelling a hearing on collective management right in November 2000, which confirmed the view towards assisting the Commission to determine effective action in the area.<sup>128</sup> In the European Parliament report entitled “*Report on a Community Framework for Collecting Societies for Authors’ Rights (2002/2274(INI))*”,<sup>129</sup> the important role of collective management societies as “an indispensable link between creators and users to facilitate users’ access to the content and circulation of works, as well as for the benefit of the entire chain” has been emphasised.<sup>130</sup> The Commission announced, in its Communication published in 2004<sup>131</sup>, that collective management rights have been included in Community legislation, in order to create a “true single market in this field”.<sup>132</sup> The EU Commission adopted a *Recommendation on Collective Cross-border Management of Copyright and Related Rights for Legitimate Online Music Services*<sup>133</sup> in 2005, aiming to apply the collective management of copyrights to online music services, in order to promote the emergence of a new generation of cross-border commercial users of copyrights (*i.e.* online music providers). The EU Parliament in 2007<sup>134</sup> invited the Commission to confirm that the 2005

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<sup>125</sup> See Follow-up to the Green Paper on copyright and related rights in the information society, COM (96) 568 final, Brussels (November 20, 1996).

<sup>126</sup> *Ibid.* The follow-up Green Paper states, “the usefulness of collective management, where appropriate, is not called into question, either now or in the future. A number of parties, however, call for harmonised measures to adequately control the behaviour of collecting societies, both in terms of licensing and competition rules. Some ask specifically for a clarification of the application of Community competition rules to collecting societies and collective management, possibly through a code of conduct or voluntary guidelines”, at 26.

<sup>127</sup> *Ibid.* The document states, “The Commission will continue to study the issue of management of rights with particular regard to the way the market evolves in response to the Information Society. The need for a comprehensive and coherent initiative at Community level which fully takes in to account Single Market and competition aspects will be considered”, at 3.

<sup>128</sup> See e.g., Conference of the Management and Legitimate Use of Intellectual Property, Strasbourg, (July 2000); Conference organized by the Portuguese Presidency at Evora, (March 2000); Public Hearing on Collective Management, Brussels (November 2000) available at, <http://europa.eu.int>.

<sup>129</sup> See European Parliament Report on a Community framework for collecting societies for authors’ rights (2002/2274 (INI)), A5-0478/2003, Final (December 11, 2003) (O.J. 2003 C 169/1)

<sup>130</sup> *Ibid.* See Section 4.

<sup>131</sup> See Commission from the Commission to the Council, the European Parliament and the European Economic and Social Committee: The Management of Copyright and Related Rights in the Internal Market, COM (2004) 261 final, Brussels (April 16, 2004).

<sup>132</sup> *Ibid.*

<sup>133</sup> See The EU Commission’s Recommendation on collective cross-border management of copyright and related rights for legitimate online music services (2005/737/EC) (O.J. 2005 L 276/21).

<sup>134</sup> See European Parliament Resolution on the Commission recommendation of 18 October 2005, P6\_TA-PROV (2007) 0064 (O.J. 2005 C 64/6).



Recommendation applies exclusively to online sales of music recordings, and to present a proposal for a flexible framework directive with the purpose of “regulating the collective copyright management concerning cross-border online music services, while taking account of the specificity of the digital era and safeguarding European cultural diversity”.<sup>135</sup>

Collecting societies have played an important role in the current public levy schemes. In most European countries adopting private copying levies, collecting societies are authorised to set levy tariffs, to collect those levies and to distribute proceeds to rightsholders. For example, in Germany, levies for private copying had been imposed by a series of collecting societies, such as GEMA (*for audio and video copying*), VG Wort and VG Bild Kunst (*for reprography*).

The extended collecting society scheme offers many advantages. First of all, users will be released from their liability in copyright infringement. As Daniel Gervais explained, “users gain peace of mind, as they sign a contract giving them unrestricted access to a CMO’s repertoire apart from specified exclusions. In other words, they will not have to face a lawsuit from a rightsholder who turns up after the contract are signed and was neither represented nor expressly excluded from the system”<sup>136</sup>. Secondly, rightsholders are capable of controlling the use of their works more effectively and efficiently. Thirdly, non-represented rightsholders also have their rights protected and can benefit from the remuneration they deserve, from their works being used for the benefit of the general public.<sup>137</sup>

As for any potential disadvantages, the use of collecting societies may lead to the risk of dominant position abuse. Adrian Sterling states that where they have a position of sole responsibility for the exercise of rights in particular areas, as is the norm, collecting societies find themselves in a monopoly situation conflicting with the laws on competition.<sup>138</sup> For instance, there are more than 20 collecting societies in the UK; each of them has a monopoly

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<sup>135</sup> Ibid.

<sup>136</sup> See Daneil Gervais, “Application of An Extended Collective Licensing Regime in Canada: Principles and Issues Related to Implementation”, *Study Prepared for the Department of Canadian Heritage* (2003), [http://www.canadianheritage.gc.ca/progs/ac-ca/progs/pda-cpb/pubs/regime/regime\\_e.pdf](http://www.canadianheritage.gc.ca/progs/ac-ca/progs/pda-cpb/pubs/regime/regime_e.pdf), at 44.

<sup>137</sup> Ibid.

<sup>138</sup> See Sterling, *World Copyright Law*, supra note 26, at 504.

right on the copyright area it administers. Although various legal systems<sup>139</sup> have adopted measures to control the monopoly position of the collectives, a number of cases have arisen<sup>140</sup> concerning the application of the EC Treaty competition rules pertaining to collecting societies within the European Community recently. For example, the German performing rights collecting societies (GEMA) was held to occupy and abuse a dominant position in “discriminating between nationals of Member States, binding its members by unjustified obligations, applying certain conditions regarding publishers, applying royalties to unprotected works, and discriminating against foreign importers of tape machines”.<sup>141</sup> In *GVL v. Commission*,<sup>142</sup> the European Court of Justice (ECJ) held that it is an abuse of a dominant position to discriminate against foreign performers when claiming remuneration for broadcasting and public performance of records. In the USA, the American Society of Composers, Authors and Publishers (ASCAP) administering the performing rights was forced to accept competition from Broadcast Music, Inc. (BMI)<sup>143</sup>.

In addition, the application of collective copyright management may impose unnecessary costs on both consumers and rightsholders. In general, the burden of disbursing the high administrative costs of operating the collective societies and anti-trust bodies rests on both

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<sup>139</sup> See, e.g., the US *Copyright Act* provides the Copyright Office with the authority to convene Copyright Arbitration Royalty Panel (CARP) to determine tariff ( See *U.S. Copyright Act* § 801, 114,115,116,118 and 119). See e.g., a specialised administrative tribunal named the Copyright Board is adopted in Canada to control competition lawsuits. See e.g., The German system set up an arbitration board under Section 14 of the Administration of Copyright and Neighbouring Rights Act. e.g., Alternative Dispute Resolution (ADR) system exists in Denmark, Ireland, Italy, Spain, Sweden and the Netherlands. See e.g., France and Portugal prefer the internal mediation between rightsholders and the CMO. See Daniel J. Gervais, *Collective Management of Copyright and Neighbouring Rights in Canada*, supra note 135.

<sup>140</sup> See, e.g., *Belgische Raio v. SABAM*, 127/73 [1974] E.C.R. 51 (In this case, the Brussels Court of First Instance referred to the ECJ whether a collecting society imposing on its members obligations which are not absolutely necessary for the attainment of its object constitutes an abuse of dominant position. See also, *Ministere Public v. Tournier*, C-395/87 [1989] E.C.R. 2811; [1991] 4 C.M.L.R. 248, ECJ (1989) 142 RIDA 289. (This case concerns the powers and duties of the EC Commission in investigating complaints of breaches of provisions of the EC Treaty. See also, *Koelman v. EC Commission*, T-575/93 [1996] CFI. (In this case, the Court analysed the EC Commission’s investigative powers and actions in response to complaints in relation to standard agreements covering cable retransmission.)

<sup>141</sup> See European Commission Decision of June 2, 1971 (IV/26760-GEMA) (O.J. 1972 L1134/15).

<sup>142</sup> See *GVL v. Commission*, 7/82 [1983] E.C.R. 483; *GVL v. Commission*, [1983] 3 C.M.L.R. 645, ECJ.

<sup>143</sup> See Stanley M. Bensen, Sheila N. Kirby and Steven C. Salop, “An Economic Analysis of Copyright Collectives”, *Virginia Law Review, Symposium on the Law and Economics of Intellectual Property*, Vol. 78(1) (1992) at 383-411. See also, Philippe Gilli’eron, “Performing Rights Societies and the Digital Environment”, *Bepress Legal Series*, Berkeley Electronic Press (2006) at 1436.

consumers and rightsholders. For instance, the UK Monopolies and Mergers Commission (MMC), as the government's anti-trust body, accepted the natural monopoly rights of the societies. However, it has been criticised for the high administrative costs: in 1999, the MCPS/PRS Alliance<sup>144</sup> had only 10.7% administration costs compared to the Korea Music Copyright Association's (KOMCA) at around 22.4%. In addition, collecting-licensing may preclude the possibility of individual licensing in the context of digital file sharing. As discussed in Part 4.2, a charge on the use of iPod does not have to be collected via collecting societies, but be paid straight to music rightsholders probably via ISPs.

#### 4.1.4.3. New Challenges Posed in the Context of Digital File Sharing

Apart from the insufficiencies listed above, the public model is afflicted by additional problems when considering the application of digital file sharing technology, compared to physical media. The origin of the public model arises from the levy on, or taxation of physical media. In the traditional media environment, collecting societies and other approaches<sup>145</sup> have been adopted to support academic information exchange.

However, creating methods to collect and distribute levies and taxes has been quite problematic in the context of digital file sharing. *Firstly*, with the public model there are difficulties in determining how to divide the royalty pool in the file sharing environment. In fact, the current recommended technologies to divide the royalty pool, such as digital watermarking<sup>146</sup>, digital

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<sup>144</sup> The "MCPS-PRS Alliance" is an operational alliance between the UK's [mechanical right collecting society](#), the [MCPS](#), and the UK's [performing right](#) collecting society, the [PRS](#). The companies license the use of [music](#) on behalf of [songwriters](#), [composers](#) and [music publishers](#). Available at, <http://www.mcps-prs-alliance.co.uk/Pages/default.aspx>.

<sup>145</sup> As we can see from above, collecting societies helps to collect and distribute monetary remedies to rightsholders, which in turn creates an environment where academic users can make use of copyright works legally. There are some other ways supported by public funds, by which academic content is made accessible to researchers and students. For example, United Kingdom Research Reserve Project (UKRR) was launched in 2007. The project is an agreement between higher education and the British Library. The purpose of this project is to establish a coordinated and sustainable system to ensure that the collection of printed journals and monographs held in UK libraries is reserved permanently and made accessible to researchers and others who wish to consult them. To develop the initiative, the higher education funding councils are funding Phase 1 UKRR. Available at, <http://www.curl.ac.uk/projects/CollaborativeStorage/Home.htm>.

<sup>146</sup> "Digital watermarking" is a technique which allows an individual to add hidden [copyright](#) notices or other verification messages to digital audio, video, or image signals and documents. Such hidden

sampling<sup>147</sup>, metering software<sup>148</sup>, and monitoring tools<sup>149</sup>, are far from accurate and reliable. To be specific, as to royalty pool dividing systems, the technological background shows that in their capacity as directly involved downloading calculation systems, the models do not reflect how much end-users value the different works they access. Say an academic user downloads two books, reads the first and then deletes it, but reads the second one in detail and quotes certain paragraphs in his/her work; the two authors would receive the same reward. Netanel states that subsequent uses are sometimes more important than counting initial downloads, as many of the initial ones are used for sampling<sup>150</sup>. He analyses:

*Subsequent uses, which might entail viewing or listening to a work or copying it onto an MP3 player or other portable device, should be given greater weight than initial downloads. Metering such uses would more accurately reflect each work's value to users than merely counting the number of downloads or even the number of hard copy purchases. Certain types of works tend to be subject to more repeated viewing, reading, or listening than others, and such ongoing use is an important component of a work's value. In addition, it appears that users often download works from P2P networks merely to determine whether they like the work, not because the user knows that she values the work in advance of*

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message is a group of bits describing information pertaining to the signal or to the author of the signal (name, place, etc.). The technique takes its name from [watermarking](#) of paper or money as a security measure. Digital watermarking can be a form of [steganography](#), in which data is hidden in the message without the end user's knowledge. See, Ingemar Cox, Matthew Miller and Jeffery Bloom, *Digital Watermarking and Steganography*, Morgan Kaufmann Publishers, 2<sup>nd</sup> ed. (2007). See also, Matthew L. Miller, L.J.Cox and Jeffery A. Bloom, *Digital Watermarking: Principles and Practices*, Morgan Kaufmann Publishers and Academic Press (2002).

<sup>147</sup> "Digital sample" is an electronic process used in [telecommunications](#) for transforming a constantly varying (analogue) signal into one composed of discrete units, a digital signal. In the creation of recorded music, sampling enables the composer, producer, or remix engineer to borrow discrete vocal or instrumental parts from other recorded work (it is also possible to sample live sound). Available at, <http://www.tiscali.co.uk/reference/encyclopaedia/hutchinson/m0020341.html>.

<sup>148</sup> "Metering software" is a technique which is used in digital payment systems, designed so that every user is capable of both buying and selling. By the online clearing and offline clearing system, it can calculate the uses of the files by end-users. See John Kelsey, Bruce Schneier, "A Peer-to-Peer Software Metering System", available at, <http://www.schneier.com/paper-meter-pp.pdf>.

<sup>149</sup> "Network monitoring tool" is also called as Network Performance Monitoring Software, Computer Monitoring Software, Monitoring Software, Real Time Monitoring Software, and Network Monitoring Tools. It refers to software that provides real-time view of individual user activity on a network, as well as provides administrators with the ability to view the content of user-utilized applications. See Les Cottrell, "Network Monitoring Tools" (Oct 29, 2006) available at, <http://www.slac.stanford.edu/xorg/nmtf/nmtf-tools.html>.

<sup>150</sup> See, Neil Weinstock Netanel, *supra* note 10, at 55-57.

downloading<sup>151</sup>.

In a traditional copyright environment, the user's intention to subsequently use the copyright work, to some degree, decides whether he will purchase the work, which in turn should accrue pecuniary benefits for the rightsholder of the work. However, unless an effective and efficient monitoring system can be created, it is difficult to determine how to divide the royalty pool in the context of file sharing practice.

Secondly, problems arise from licensing multimedia<sup>152</sup> works. The Information Society has changed the traditional physical media from hard copy (e.g., CDs, DVDs, recorders) to new formats which comprise new types of use for copyright works. Compared to the traditional model where licensing of the utilisation of physical media is authorised by different collecting societies, the lack of a central 'body' capable of the licensing of multimedia works questions the application of traditional collective copyright management system into the digital world.

Thirdly, worldwide access to copyright works via digital file sharing networks challenges the national character of collecting societies. For instance, if a Belgium user uploads a British musician's work to the file sharing network, and a German user downloads the work for his private use, should the private copying levy be collected by GEMA, PRS or SABAM? Traditionally, there are "reciprocal presentation contracts"<sup>153</sup> between national copyright management societies, which means "a particular national society controls within the territory the entire world repertory of works"<sup>154</sup>. Some international organisations such as CISAC (*Confederation Internationale des Societes d'Auteurs et Compositeurs*), BIEM (*Bureau International de Edition Mecanique*) and IFRRO (*International Federation of Reproduction*

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<sup>151</sup> Ibid.

<sup>152</sup> "Multimedia" is media that uses multiple forms of [information content](#) and [information processing](#) (e.g. [text](#), [audio](#), [graphics](#), [animation](#), [video](#), [interactivity](#)) to inform or entertain the (user) audience. *Multimedia* also refers to the use of (but not limited to) [electronic media](#) to store and experience multimedia content. Multimedia is similar to traditional [mixed media](#) in [fine art](#), but with a broader scope. See Tay Vaughan, *Multimedia: Making it*, McGraw-Hill Osborne Media, 7<sup>th</sup> ed. (2006).

<sup>153</sup> See [Kevin Garnett](#), [Johathan Rayner James](#), [Gillian Davies](#), *Copinger & Skone James on Copyright*, supra note 64, at para. 28-25.

<sup>154</sup> See [Kevin Garnett](#), [Johathan Rayner James](#), [Gillian Davies](#), *Copinger & Skone James on Copyright*, supra note 64, at para. 28-25. See also, Lionel Bently and Brad Sherman, supra note 97, at 271.

*Rights Organisation*) have been set up to distribute remunerations to the international rightsholders.<sup>155</sup> However, global digital file sharing requires these collecting agency agreements to be worthy of re-consideration in practice.

*Fourthly*, digital technology such as Digital Rights Management (DRM) and online licensing improves the feasibility of individual licensing. By facilitating identification and tracking of the use of works, digitisation “empower[s] right-holders to control the licensing, transform[ing] the collection and distribution of royalty into a process of individual electronic payment”<sup>156</sup>. Generally speaking, collective right management originates from the incapability of individual licensing under certain circumstances. If an effective individual licensing system became possible, would collecting societies have outlived their usefulness?

There are different opinions as to whether collecting societies remain relevant in the file sharing environment.

Some<sup>157</sup> advocate that an EC community initiative on the cross-border collective copyright management may be a possible solution to the digital file sharing problem. Based on a collecting society model from the radio entertainment industry, scholars<sup>158</sup> recommended that the collecting society system be adopted in the context of digital file sharing. For example, the White Paper of the Electronic Frontier Foundation (EFF) proposed a collective licensing model, which stated that:

*[T]he music industry forms a collecting society, which then offers file sharing music fans the opportunity to “get legit” in exchange for a reasonable regular payment, say \$5 per month. So long as they pay, the fans are free to keep doing what they are going to do*

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<sup>155</sup> See Constanze Ulmer-Eilfort, *Private Copying and Levies for Information and Communication: Technologies and Storage Media in Europe, Digital Rights Management*, Berlin: Spriner-Verlag, (2003).

<sup>156</sup> See Study on a community initiative on the cross-border collective management of copyright, Commission working document of the EC, Brussels (July 7, 2005).

<sup>157</sup> Ibid. See also, See European Parliament Resolution on the Commission recommendation of 18 October 2005 (O.J. 2005 C.64/6) P6\_TA-PROV (2007)0064.

<sup>158</sup> See, e.g., Fred Von Lohmann, “Voluntary Collective Licensing for Music File Sharing,” *Communication of the ACM*, Vol. 47 (10) (2004).

*anyway—share the music they love using whatever software they like on whatever computer platform they prefer—without fear of lawsuits. The money collected gets divided among rights-holders based on the popularity of their music. ... In exchange, file sharing music fans will be free to download whatever they like, using whatever software works best for them. The more people share, the more money goes to rights-holders. The more competition in applications, the more rapid the innovation and improvement. The more freedom to fans to publish what they care about, the deeper the catalog[ue].*<sup>159</sup>

In the *IFPI “Simulcasting” Agreement*,<sup>160</sup> the European Commission considered a Reciprocal Agreement between collecting societies in the EEA and elsewhere. Compared to the public levy/tax model exemplified by German scheme, the reciprocal agreement idea would specifically avoid file sharing intermediaries’ liability for their users’ copying behaviours. According to the Commission, the essential feature of a multi-repertoire and multi-territorial Agreement is the “country-of-destination” principle. The application of the principle in reciprocal agreements means that “right clearance is done in one country but that remuneration is due in all countries where the simulcast signal can be received”.<sup>161</sup> Regarding remuneration distribution, the Commission decided that “the tariff ... w[ould] be an aggregate tariff composed of the relevant individual tariffs charged by each participating collecting society for simulcasting on its own territory ... the society [also had to] take into account all the relevant national tariffs, including its own for the determination of a global licence fee”.<sup>162</sup> In practice, however, the cross-border licensing idea has been challenged. There is no universally acceptable multi-repertoire and multi-territorial agreement for all the rightsholders who share their works online. The situation on a territory-by-territory basis does not match the globalised nature of digital file sharing networks. Moreover, current collective rights management systems do not offer non-

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<sup>159</sup> See “A Better Way Forward: Voluntary Collective Licensing of Music File Sharing”, *Electronic Frontier Foundation White Paper* (2004) available at, <http://www EFF.org/share/collective-lic-wp.pdf>.

<sup>160</sup> See *European Commission Decision relating to a proceeding under Article 81 of the EC Treaty and Article 53 of the EEA Agreement*, COMP/C2/38.014 (O.J. 2002 L 318/17) (October 3, 2002).

<sup>161</sup> *Ibid*, at para 21.

<sup>162</sup> *Ibid*, at para 24.

discriminatory distribution of royalties for all rightsholders. Most existing reciprocal agreements do not mention that royalties collected should be distributed amongst all rightsholders in an equitable and non-discriminatory manner, nor do they provide practical ways of collecting and distributing royalties amongst Member States. Finally, the national nature of existing collective management services may not be able to allow for an effective cross-border collective society system developing in practice.

Some others propose that a legal broadband licence fee should be imposed on ISPs and other intermediaries to compensate rightsholders for unlawful file sharing by their customers. In 2006, an entertainment industry coalition in London suggested that ISPs should be responsible for their users' illegal copying activities, reflecting in the payment of a license fee.<sup>163</sup> Thus, in the 2008 report, the UK government considered that a flat rate "tax" might be collected via ISPs in the UK. According to the report, certain legal broadband subscription services, including the royalty share between mechanical, sound recording and publishing rightsholders and administration issues, may be charged to compensate declining revenues for rightsholders.<sup>164</sup> However, after considering potential risks involved in such ISPs' levies, no agreement has been signed yet. The original fear of losing the ability to set a price for music has been largely superseded by concerns about setting prices too low. Once fixed, it may prove difficult to change the rate. Moreover, there is further concern about the possible detrimental impact on the traditional entertainment market, given that "unlimited legal" access to entertainment content may damage sales of CDs and DVDs.

Others argue individual licensing will work, making a public levy unnecessary. A staff working document of the EC<sup>165</sup> suggests that online licensing and DRM technology "empower[s] rightsholders to control the licensing, transform[ing] the collection and distribution of royalty into a

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<sup>163</sup> See "Music Industry Proposes ISP Tax", *OUT-LAW News* (2006) available at, <http://www.out-law.com/page-7104>.

<sup>164</sup> See Andrew Orlowski, "Legal, British P2P by End of Year" (2008) available at, [http://www.theregister.co.uk/2008/06/26/music\\_service\\_provider\\_talks/](http://www.theregister.co.uk/2008/06/26/music_service_provider_talks/).

<sup>165</sup> See *Study on a Community Initiative on the Cross-border Collective Management of Copyright*, Commission working document of the EC, Brussels (July 7, 2005).



process of individual electronic payment”<sup>166</sup>. But the high costs of DRM prevent economically weaker authors from enjoying individual licensing, perceived as a significant impediment to the individual licensing idea.

The application of digital file sharing highlights difficulties within the remit of collecting societies and emphasises the problems of royalty collection and distribution in the environment created by the adoption of new technology.

## **4.2 The Private Model: Selling and Subscription Agreements**

Private contract systems have been promoted in the entertainment market as a counter to private copying. Initially, it is desirable to define the term “private model”. “Private contract model” refers to collecting compensation for rightsholders by private agreements between users and rightsholders, without involving a public body imposing a levy. Importantly, there is no clear consensus on ‘the private model’. Instead there are several different models in practice. Apple’s iTunes Music Store, the most popular global music download store, is discussed below as a case study. The private model has been deployed not only in the entertainment industry, but also in academic and educational practice, such as *Westlaw* and *Lexis*, which require users to obtain accounts via an annual subscription in return for allowing access to information resources.

### ***4.2.1 The Selling Contract Model: the U.S. iTunes Service***

Since the opening of the iTunes Music Store in 2003, Apple Company has provided consumers with a catalogue of over 500,000 tracks, including music from all four major labels<sup>167</sup>, based on the business-consumer contract design<sup>168</sup>. Apple’s iTunes was the first service with content from

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<sup>166</sup> Ibid.

<sup>167</sup> “Major labels” refer to the “Big Four record companies” which dominate the recording market. As of 2006, it includes [Universal Music Group](#), [Sony BMG Music Entertainment](#), [EMI Group](#), and [Warner Music Group](#).

<sup>168</sup> See Appendix 1, iTunes Store Terms of Service, available at, <http://www.apple.com/legal/itunes/us/service.html>. (last accessed on 18/05/2007).

rightsholders to sell songs with no subscription fees. Applying the *à la carte* pricing style<sup>169</sup>, the U.S. iTunes charges \$0.99 per song to allow consumers to download a purchased song once; use the song on three computers; move the song to a portable iPod unlimited number of times; make unlimited CD burns, with burning the same exact playlist no more than 10 times.

The iTunes business model relies upon the contract between Apple Company and the consumer effectively reallocating copyright entitlements. In effect, Apple utilises two legal strategies to set up consumers' rights and reliability from iTunes Music Store: agreements through contract, and limitations on rightsholders. Apple's clickwrap contract licenses a limited use of copyright works. For instance, §9(b) of iTunes Music Store Terms of Service permits users to copy a downloaded music file on up to three computers, and to burn an audio playlist up to seven times.<sup>170</sup> However, the agreement requires consumers to forego certain rights and defences under copyright law in exchange for access to the iTunes' music. For example, §8(b) of the iTunes Music Service Terms requires iTunes users "not to attempt to, or to assist another person to, circumvent, reverse-engineer, decompile, disassemble, or otherwise tamper with any of the security components ... for any reason whatsoever"<sup>171</sup>. This term waives any right related to reverse-engineering the software consumers may have under copyright law<sup>172</sup>. §13(a) states that

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<sup>169</sup> See "Jupiter Research: Business Intelligent for Business Results", available at, <http://www.weblogs.jupiterresearch.com/analysts/gartenberg/archives/Jupiter%20Apple.pdf>.

<sup>170</sup> See §9(b) of iTunes Music Store Terms of Service, see Appendix 2.

<sup>171</sup> See §8(b) and 9(b) of iTunes Music Service Terms, see Appendix 2.

<sup>172</sup> See e.g., §1201(f) of 17 United States Copyright Act, which states that:

"(f) Reverse Engineering —

(1) Notwithstanding the provisions of subsection (a)(1)(A), a person who has lawfully obtained the right to use a copy of a computer program may circumvent a technological measure that effectively controls access to a particular portion of that program for the sole purpose of identifying and analyzing those elements of the program that are necessary to achieve interoperability of an independently created computer program with other programs, and that have not previously been readily available to the person engaging in the circumvention, to the extent any such acts of identification and analysis do not constitute infringement under this title.

(2) Notwithstanding the provisions of subsections (a)(2) and (b), a person may develop and employ technological means to circumvent a technological measure, or to circumvent protection afforded by a technological measure, in order to enable the identification and analysis under paragraph (1), or for the purpose of enabling interoperability of an independently created computer program with other programs, if such means are necessary to achieve such interoperability, to the extent that doing so does not constitute infringement under this title.

(3) The information acquired through the acts permitted under paragraph (1), and the means permitted under paragraph (2), may be made available to others if the person referred to in paragraph (1) or (2), as the case may be, provides such information or means solely for the purpose of enabling interoperability of an independently created computer program with other programs, and to the extent that doing so does not constitute infringement under this title or violate applicable law other than this section.

the users agree “not to modify, rent, lease, loan, sell, distribute, or create derivative works” from downloaded music<sup>173</sup>. This provision waives consumers’ certain resale rights<sup>174</sup>, and unnecessarily distinguishes the use of iTunes songs from normal uses of copyright works, such as making use of the content in a book. Moreover, Apple further retains the “right to change, suspend, remove, or disable access ... at any time without notice”.<sup>175</sup>

This contractual control over iTunes’ music renders the private model less favourable to consumers’ interests than under general copyright law. To clarify substantial drawbacks in the private contract system, I shall group the problems related to the private model into “internal problem” and “external conflict”. The ‘internal’ problem in this subpart refers to contradictions existing in service terms of contracts. ‘External’ problems result from the conflict between technology development and fair use doctrine.

#### ***4.2.2 Evaluating the Private Model***

##### **4.2.2.1. The Internal Problem: Contract v. Fair Use**

As discussed above, private contracts entitling service providers rights to limit the use of their services would lead to confusion and difficulty for consumers when applying fair use defence.

Apple places many restrictions in its contract limiting the consumer’s use of downloaded music. With regard to consumer laws, users should have the right to benefit from the digital devices they purchase without abusive restrictions. Protecting this aspect of “consumer rights”<sup>176</sup> is to serve the “interests of the public”, which is also a fundamental principle of copyright law. However, some digital rights management formats have embedded capabilities to “limit the

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*(4) For purposes of this subsection, the term “interoperability” means the ability of computer programs to exchange information, and of such programs mutually to use the information which has been exchanged.”*

<sup>173</sup> See §13(a) of iTunes Music Service Terms.

<sup>174</sup> See Part III Digital First Sale Doctrine, United States Copyright Act 1971.

<sup>175</sup> See §14(b) of iTunes Music Service Terms.

<sup>176</sup> See Laurier Yvon Ngombe, Technical Measures of Protection versus Copyright for Private Use: Is the French Legal Saga Over?” *E.I.P.R.* Vol. 29(2) (2007) at 61-65.

ways in which digital content can be used reducing the consumers' choice"<sup>177</sup> generating such conflicts with consumer protection. Compared to purchasing a substantial book, iTunes' consumers' ability to access the "goods" they own is greatly limited. As described in the National Research Council Study Report,

*"Buy a book and you own it forever; pay for a service and when the period of service is over, you retain nothing. The increased use of licensing seems to diminish greatly the public access accorded through the first-sale rule. ... In the world of licensed information, ending a subscription to an electronic journal may mean the end of access to earlier volumes or editions, as well"*<sup>178</sup>

Apple's iTunes Music Store exemplifies where consumers are not appropriately fully informed concerning the limitation imposed by the application of service terms. iTunes only offer "DRMed" downloads that have limited use on selected computers.<sup>179</sup> Article 20 of *iTunes Music Terms of Service* states that Apple reserves the right "to update, revise, supplement [...] and modify this Agreement and to impose new or additional rules, policies, terms or conditions on [consumers'] use of the Service"<sup>180</sup> by the FairPlay DRM system. Apple is therefore capable of imposing unilateral changes in conditions of use on legitimately downloaded files. This indicative and non-exhaustive list in contract terms is prohibited by law and considered unfair. According to the EC Directive on unfair terms in consumer contract<sup>181</sup>, iTunes Music Store Service Terms "enable the seller or supplier to alter the terms of the contract unilaterally without a valid reason which is specified in the contract"<sup>182</sup>, which breaches fundamental consumer rights. The Norwegian Consumer Council presented a complaint against iTunes Music Store on

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<sup>177</sup> See Nicola Lucchi, «Countering the Unfair Play of DRM Technologies», *Texas Intellectual Property Law Journal*, Vol. 16 (1) (2007).

<sup>178</sup> See National Research Council, "The Digital Dilemma: Intellectual Property in the Information Age", *Commerce on Intellectual Property, Rights and the Emerging Information Infrastructure*, (2000) at 79-86.

<sup>179</sup> See Neil Weinstock Netanel, *supra* note 10, at 38.

<sup>180</sup> See iTunes Music Store Terms of Service, Article 20. available at, <http://www.apple.com/ca/support/itunes/legal/terms.html>.

<sup>181</sup> See The EC Directive on Unfair Terms in Consumer Contracts, 93/13/EEC, (O.J. 1993 L 95/29) 1993.

<sup>182</sup> *Ibid*, annex letter j, letter k.

January 25, 2006.<sup>183</sup> Considering that some of iTunes terms applied or intended to be applied in the conduct of business with consumers “[may] be prohibited if the terms and conditions are considered unfair on consumers and if general considerations call for such a prohibition”,<sup>184</sup> Mr. Thon decided these terms and conditions are unreasonable and unfair by contravening Section 9a of the Norwegian Marketing Control Act. Thus, Apple’s reservation of the right to unilaterally change the usage of agreement without notice violates the essential principles of contract law and consumer protection law.

Also, iTunes Terms of Service includes language forms which may preclude fair use of downloaded music. §13(a) of US iTunes Terms of Service requires consumers agree that “the service [of the iTunes Music Store], including but not limited to graphics, audio clips, and editorial content, contains proprietary information and material that is owned by Apple and/or its licensors ... and that [they] will not use such proprietary information or materials in anyway whatsoever except for use of the Service in compliance with the terms of this Agreement [the iTunes Service Terms].” According to this provision, the music files downloaded from iTunes music store are not supposed to be used “in anyway whatsoever”, including for fair use purposes. This conflict between contract terms and users’ rights in copyright is also embodied in UK and French iTunes Terms of Service.<sup>185</sup>

Additionally, the private contract model relies on the scope of rightsholders’ authorisation. In fact, entertainment companies may not have the right to release all the contents which consumers seek. For instance, an entertainment company may have the right to release a song as a CD or a cassette tape, but not in digital format<sup>186</sup>. As a result, it is not equivocally clear who holds the rights for online releases. The situation is even more problematic regarding re-issuing out-of-

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<sup>183</sup> See “Norwegian Consumer Ombudsman Complaint against iTunes Music Store” (Jan 25, 2006), <http://forbrukerportalen.no/filearchive/Complaint%20against%20iTunes%20Music%20Store.pdf>. See Jo Singstad, “iTunes’ questionable terms and conditions” (Jan. 25, 2006) available at <http://forbrukerportalen.no/Artikler/2006/1138119849.71> (last visited Jan. 8, 2007). See also, Norwegian Marketing Control Act relating to the control of marketing and contract terms and conditions, No.47 (16 June 1972).

<sup>184</sup> Ibid.

<sup>185</sup> See §13 of UK iTunes Music Store Terms of Service. See also, §13 of France iTunes Store Conditions generales du service

<sup>186</sup> See John Borland, “Beatles Catalog Headed for Digital Distribution?” *CNET News.com* (June 8, 2004) available at, [http://www.news.com.cn/2100-1027\\_35228914.html](http://www.news.com.cn/2100-1027_35228914.html).

catalogue songs — songs which are old, obscure, or out-of-market.

Matthew Hilton points out, “rights and duties have always lain at the heart of consumer policies”<sup>187</sup>. Consumers have certain fundamental rights in the digital world also, and consumer protection law works as a means to reduce imbalances between consumers and service providers. In practice, however, the use of unfair contracts and DRM technologies embedded in consumer products potentially violates consumers’ right to “know what they can do with their digital hardware and content as well as the limit of their usage”<sup>188</sup>.

#### 4.2.2.2. The External Problem: Code v. Fair Use

The external problem originates from the specific technical design of file sharing tools. Consider how Apple’s iTunes has struggled in these circumstances. Digital Right Management (DRM) systems deployed in Apple’s iPods have insinuated concerns regarding the interoperability of Apple’s machines. By using FairPlay<sup>189</sup> DRM scheme, Apple requires that iTunes be the only store which sells music supported by iPods. Thus iPod users are not able to play downloaded music from retailers other than iTunes.

There have been disputes on whether Apple is supposed to open its FairPlay technology platform to make “iTunes be we Tunes”.<sup>190</sup> Service providers, like Apple, would not release the FairPlay technology because licensing might damage their monetary benefit. Francois Leveque asserts, “Compatibility is not free of charge”<sup>191</sup>. Apple announced that a license will generate additional

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<sup>187</sup> See Matthew Hilton, “The Duties of Citizens, the Rights of Consumers”, *Consumer Policy Review*, Vol. 15 (2005).

<sup>188</sup> See Consumers Digital Rights Campaign. Available at, <http://consumersdigitalrights.org/>.

<sup>189</sup> “FairPlay” is an Apple proprietary technology to secure files encoded in the standards-based AAC(Advanced Audio Coding) format. See, “The iTunes Music Store: does competition law hold the key to a closed shop?” *RECKON Regulation and Competition Economics* (2004) available at, <http://www.reckon.co.uk/open/iTunes>.

<sup>190</sup> See Navin Chandak and Carlisle George, “Can iTunes be weTunes? - Is FairPlay Playing Fair?”, *BILETA 2005 Annual Conference* (2005) Queens University Belfast, available at, <http://www.bileta.ac.uk/Document%20Library/1/Can%20iTunes%20be%20weTunes%20-%20Is%20Fair-Play%20Playing%20Fair.pdf>.

<sup>191</sup> See Francois Leveque, “Is Online Music Locked in by Leveraging?” *Communications and Strategies*, No.63 (2006).

costs to guarantee the security of its DRM<sup>192</sup>, in turn increasing the cost to consumers. If all these costs are higher than that in a non-licensing environment, “not licensing is profitable to Apple and in the general interests”.<sup>193</sup>

However, there are those who claim opening Apple’s FairPlay provides an opportunity to benefit all consumers, as well as to prevent monopoly. Firstly, consumers are not being well-served when locked into specific formats by businesses as a way of maintaining market share. Chandak and George argue that “the inter-operability of existing digital music file formats will be beneficial to all consumers. ...[on the ground that] the new interoperable devices will ... cater more to the needs of the consumer rather than to the pockets of big business. ...[C]onsumer truly is the king”<sup>194</sup>. Secondly, EC competition law will require Apple to meet requests from other online music retailers by granting licenses to the FairPlay technology insofar as is necessary to allow supply of secured music downloads to iPod users. According to Article 82 of the EC Treaty<sup>195</sup>, as an undertaking within a dominant position in a relevant market, Apple has “a special responsibility not to allow its conduct to impair undistorted competition”<sup>196</sup>. In legal practice, however, the scheme of inter-operating DRM systems is unclear as it appears within different legislations.

It is interesting to note that the French Parliament passed the law on copyright and related rights on August 2006, known as DADVSI (loi relative au Droit d’Auteur et aux Droits Voisins dans la Societe de l’Information), which sets the principle that DRMs and TPMs “must not have the

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<sup>192</sup> See *VirginMega v. Apple*, Conseil de la concurrence, Judgment, No.04D54 (Nov 9, 2004) §93, §94.

<sup>193</sup> See Chandak and George, *supra* note 189.

<sup>194</sup> *Ibid.*

<sup>195</sup> See Article 82 of EC Treaty (ex. Article 86), stating that “Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market insofar as it may affect trade between Member States. Such abuse may, in particular, consist in: (a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions; (b) limiting production, markets or technical development to the prejudice of consumers; (c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage; (d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

<sup>196</sup> See, *Michelin v. Commission*, C-322/81 [1983].

effect of preventing effective interoperability”.<sup>197</sup> This is the first provision in the world seeking clarity in preventing “the segmentation of the offer of cultural goods according to the configuration of the playing device, or that a particular good which would be only available in a particular online store, would also be accessible only through a certain type of player”.<sup>198</sup>

Another noteworthy development is that from April 2<sup>nd</sup> 2007, EMI allowed its songs to be sold on iTunes without DRM protection for the first time<sup>199</sup>. Despite some music companies’ critique, EMI believes without DRM-protection, users can have the flexibility to listen to music purchased from iTunes on any number of devices. Although these “ambitious frameworks”<sup>200</sup> still need to be tested, the idea of dropping DRM systems deserves further attention.

#### **4.2.3 Analysis: Applying the Private Model to Academic Digital File Sharing**

The private contract model suggests an efficient way for the entertainment industry to collect market rewards for rightsholders. Authors trading their rights to interceding publishers will likely benefit from enhanced market price rewards. By comparison, pecuniary compensation for authors in the public model is lower (or likely to be so). Through controlling market price via the DRM scheme and imposing certain limitations in their contracts, authors and rightsholders are potentially able to obtain even more reward by the private model. The contracts or licenses also improve the clarity of the copyright system for the rightsholders. For example, the terms of the license may release Napster from potential liability of copyright, and all the while users are able to download music without worrying about being sued for copyright infringement.

However, is this model workable in the context of educational and research materials? The private model requires payment according to the service terms or licenses. Each user of the

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<sup>197</sup> See Article L.331-5 of DADVSI (loi relative au Droit d’Auteur et aux Droits Voisins dans la Societe de l’Information).

<sup>198</sup> Quoted from Nicolas Jondet, “La France v. Apple: Who’s the dadvsi in DRMs?” *SCRIPT-ed*, Vol 3(4) (2006) at 473-484.

<sup>199</sup> See, “Apple and EMI deal drops DRM”, *Channel 4 News* (02 April, 2007) available at, [http://www.channel4.com/news/articles/science\\_technology/apple+and+emi+deal+drops+drm/375352](http://www.channel4.com/news/articles/science_technology/apple+and+emi+deal+drops+drm/375352).

<sup>200</sup> Ibid.



service is charged for his use, whether the use is “fair” or not. In other words, certain information previously accessible to academic users without any charge, including academic information for research and education, will fall within the domain of “pay-for-use”. Academic information may then be less accessible through being too expensive for academic users. Although authors, publishers and rightsholders are entitled to pecuniary compensation, the private model challenges the application of fair use doctrine and UK fair dealing educational exception by failing to protect social benefits, especially academic users’ rights in copyright law.

### **4.3 Conclusion:**

Today, digital file sharing technology poses a serious challenge both to the interests of the entertainment industry, and the application of fair use doctrine. Seeking correction, commentators have proposed different solutions, ranging from collecting public levies/taxes, to imposing private contracts. The above analysis suggests that neither the public levy scheme, nor the private contract model, will provide ultimate solutions to the problem of unauthorised copying in the context of access to research and educational materials.

The public levy model requires the payment of a levy or a tax on digital media and services. On the one hand, the entertainment industry is dissatisfied with the application of statutory levies or taxes, on the basis that the public model may not collect sufficient compensation for copyright holders based on a pre-set flat levy/tax rate. On the other hand, research and educational users may lose their “fair” access to copyright works in the application of a public model. With the statutory levy/tax scheme, every user of digital equipment is charged for his use of the machine, whether the use is “fair” or not.

The private model may present an effective template to use for entertainment file sharing. However, it suffers from much the same problem as the public model. According to the private contract or agreement, rightsholders can obtain monetary remedy by selling the copyright content, leaving the public no choice but to pay for use of the copyright works.

There are concerns about applying such “fared use” to digital file sharing, especially in the context of research and education. By setting up a compulsory payment for the use of all copyright materials, the fared use proposal may hinder access to knowledge by some “fair” users. For example, the fared use model requires payment based on the pre-set flat levy/tax rate or service licenses, so that each user is charged for his use, no matter whether it falls within the domain of fair use. Thus, certain information which previously was accessible to academic users without any charge becomes “pay-for-use”, which may make research and educational information less accessible through being too expensive for academic users. Okerson argues that the essential constitutive role of fair use doctrine for a democratic society is social benefits which can “neither be measured nor reflected in terms of consumer purchasing decisions”<sup>201</sup>. David Post also states, “once tracking and payment mechanisms of [copyright materials] are in place, ... there will [be no] place for fair use”.<sup>202</sup> The nature of exaggerating economic value of copyright materials results in incompatibility between the fared use model and fair use doctrine.

Compared to these two “fared” use models above, the voluntary model offers a more promising basis for discussion towards restoring an appropriate equilibrium to fair use doctrine. In the following chapter, the question how, and to what degree, the voluntary proposal can be successfully practiced will be evaluated.

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<sup>201</sup> See Ann Okerson, “Who Owns Digital Works”, *Scientific American*, Vol. 84 (1996) at 339.

<sup>202</sup> See Bernt Hugenholtz, Lucia Guibault, Sjoerd Van Geffen, *The Future of Levies in Digital Environment*, Amsterdam: Institute for Information Law (2003).

## Chapter 5. The Voluntary Model: An “Un-fared” Model

The disadvantages of the public and private models, as outlined in Chapter 4, suggest that we should consider a fundamental change in approach towards solving the fair use problem in academic file sharing. Specifically, this Chapter proposes that we replace the “fared” models with an “un-fared” strategy — a voluntary model —referring to a system where authors release their copyright content for “free”, thus avoiding the problem of closing down the file sharing “gateway”. It is noteworthy that there may be non-monetary forms of compensation, such as reaching larger audiences, or enhancing reputation and influence.

### 5.1 The Voluntary Approaches: “Give it away”

*The whole purpose of information is to be shared, as the purpose of bread is to be eaten.*

— Open Access Publishing and Scholarly Societies<sup>1</sup>

#### 5.1.1 Early Ideas about the Voluntary Model

Scholars have proposed a number of ways voluntary contribution may be collected. Some suggest a *Tipping Technique* way, a method which allows users to target voluntary payments to the artist based on information embedded in a digital file<sup>2</sup>. For instance, Fred Hapgood notes that voluntary payments can be targeted to specific artists or to categories of artists<sup>3</sup>, while Joost Smiers asserts that specific kinds of artists can be supported by payments, dissociated from the use of specific works<sup>4</sup>. Economists and sociologists have identified that the tips collected in this way may account to a considerable revenue, given the fact that consumers pay more than \$20 billion of tips to waiters and others every year in U.S.<sup>5</sup> Assuming individual file-sharers are

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<sup>1</sup> See “Open Access Publishing and Scholarly Societies: A Guide”, *Open Society Institute* (2005) available at, [http://www.soros.org/openaccess/scholarly\\_guide.shtml](http://www.soros.org/openaccess/scholarly_guide.shtml).

<sup>2</sup> See Jeff Kandt, “Tipster Technical Overview: A Napster Friendly Business Model for Musicians” (2002) available at, [http://tipster.weblogs.com/stories/storyReader\\$180](http://tipster.weblogs.com/stories/storyReader$180)

<sup>3</sup> See Fred Hapgood, “Voluntary Payments” (2003), available at, <http://tipster.weblogs.com/hapgood>

<sup>4</sup> See Joost Smiers, “The Business of Intellectual Property: Copyright is Wrong”, *Le monde Diplomatique* (2001) available at, <http://www.en.monde-diplomatique.fr/2001/09/10copyright>

<sup>5</sup> See Ofer H. Azar, “The Social Norm of Tipping: A Review” (2002) available at, <http://ideas.repec.org/p/wpa/wuwpot/0309006.html>

willing to tip a penny per song, the model will realise hundreds of millions of pounds per year since file-sharers trade billions of sounds on the Internet per month.

Some others advocate the “ransom model”, labelling it OpenCulture<sup>6</sup>. The intent of OpenCulture is to pay rightsholders by public donation for creating a digital library of free books and music. The public donations could be used to compensate authors; in turn, the authors must “agree to release their works upon payment, subject to a permanent, free-use license that runs to the public at large”<sup>7</sup>. For example, *The Street Performer Protocol* suggested by Diane Leenheer Zimmerman, provides authors with a platform to set a release price for the works subject to permanent free-use license once the asking price is met.<sup>8</sup> Kevin Maney envisions a hybrid model by combining the tipping model with pricing<sup>9</sup>. He provides free sample to users; if the users wish to burn the album on a CD, they have to pay for it. Instead of a set price, Magnatune uses a “dynamic price”, i.e., users can pay as much as they want, with a minimum at \$5 per album<sup>10</sup>.

With all the models proposed above, however, voluntary contributions have never yielded any “meaningful remuneration”<sup>11</sup> for rightsholders in practice. As Janet Kornblum discusses, “[T]ip jars aren’t likely to replace ads or other revenue sources”.<sup>12</sup> The risks of the early voluntary way model lie in its honour code foundation and operation. In theory, the feature of an honour code casts scepticism on voluntary contribution models. Economically speaking, consumers’ self-interested nature will ultimately drive down prices and limit the production of copyright works.<sup>13</sup>

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<sup>6</sup>See OpenCulture, “Frequently Asked Questions” (2004) available at, <http://www.openculture.org/About/faq.html>.

<sup>7</sup> See Diane Leenheer Zimmerman, “Authorship without Ownership: Reconsidering Incentives in a Digital Age”, *DePaul Law Review*, Vol. 52 (2003) at 126.

<sup>8</sup> Ibid.

<sup>9</sup> See Kevin Maney, “Apple’s iTunes Might Not Be Only Answer to Ending Piracy”, *USA Today* (Jan 21, 2004).

<sup>10</sup> See Tobias Regner and Javier A. Barrier, “Magnitude: Variable Pricing for Music” (2005) available at, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=721596](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=721596).

<sup>11</sup> See Neil W. Netanel, “Impose a Noncommercial Use Levy to Allow Free Peer-to-peer File Sharing”, *Harvard Journal of Law and Technology*, Vol. 17(1) (2003) at 76.

<sup>12</sup> See Janet Kornblum, “Aren’t Too Proud to Bed on the Net”, *USA Today* (January 8, 2002).

<sup>13</sup> See Peter K. Yu, “P2P and the Future of Private Copying”, Michigan State University College of Law, *Legal Studies Research Paper Series*, Research Paper No. 02-08 (2004) at 48. See also, Earl R. Brubaker, “Free Ride, Free Revelation, or Golden Rule?” *Journal of Law and Economics*, Vol. 18 (1975) at 147.

For instance, Stephen King released the first six chapters of his novel, *The Plant*, on the Internet in 2000. King used *Amazon.com* to collect one dollar or more from each prospective reader for every chapter he actually downloaded. Once 75% of those who downloaded the previous chapter paid for it, he promised to release the next one. Unfortunately, by the time the fourth installment was released, less than half of readers would pay for the downloading. Another dominant “give it away” example of recent times is Radiohead’s album *In Rainbows* promotion.<sup>14</sup> In October 2007, Radiohead surprised the entertainment industry by allowing users to pay whatever they wanted for the album to obtain the download version. Although Radiohead expected “most people [would pay] a normal retail price with few trying to buy for a penny”, a survey conducted by *Record of the Day*<sup>15</sup> indicated that about 1/3 of users downloading the album for nothing, with the average price paid being £4. Considering the revenue was far less than expected, the band shut down the dynamic price promotion and changed to a traditional CD retailing sales approach by December 2007.

The failure of Radiohead<sup>16</sup> and Stephen King<sup>17</sup> expressed the existence of a degree of risk, casting doubt on whether “honour” can realistically deliver. The emphasis on mercantile purpose in this model also places authors in an embarrassing situation where they have to make a choice between free expression and earning money. As Forrester analyst Dan O'Brien said, “I think that whole motto of sort of nickel-and-diming people of this per chapter basis was a mistake. Every chapter was another test of whether people would pay the threshold that (King) determined. I thought it got in the way of the relationship between the writer and audience--it was too mercantile.”<sup>18</sup>

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<sup>14</sup> See Julian Marshall, “Rainbow Warriors”, *NME* (Dec 8, 2007).

<sup>15</sup> See “Radiohead in Rainbows: What Price did You Choose? Survey Results”, *Record of the Day*, available at, <http://www.whatpricedidyouchoose.com/>.

<sup>16</sup> See supra note 15.

<sup>17</sup> See Janelle Brown, “Stephen King’s Horrifying Proposal” (2003) available at, <http://www.archive.salon.com/tech/log/2000/06/13/king/print.html>. See also, Stephen King, “How I Got That Story”, *Time Europe* (2000) available at, <http://www.time.com/time/europe/magazine/2001/0108/king.html>.

<sup>18</sup> See Gwendolyn Mariano, “Stephen King puts ‘The Plant’ on ice”, *CNET News.com* (Nov 28, 2000), available at, [http://news.com.com/Stephen+King+puts+The+Plant+on+ice/2100-1023\\_3-249133.html](http://news.com.com/Stephen+King+puts+The+Plant+on+ice/2100-1023_3-249133.html).

### ***5.1.2 Access to Knowledge (A2K): A New Approach to the Voluntary Model***

Despite the failure of the early voluntary contribution method, disseminating information broadly and freely has always been desirable, especially with the rapid growth of digital reproduction and communication technologies. Over the last ten years scholars and researchers worldwide have established a movement known as Open Access (OA), in order to minimise limitations presented by traditional licensing in the context of the digital world.

#### **5.1.2.1. Open Access (OA) Movement**

According to the Berlin Declaration, Open Access (OA) is defined as “a comprehensive source of human knowledge and cultural heritage that has been approved by the scientific community”<sup>19</sup>. The OA movement “springs from the potential unleashed by the electronic medium, and by the world wide web”<sup>20</sup>, which aims to harness information and communication technology advancement to enhance access to research and education material.

The OA idea has been adopted and further developed in a number of international declarations. The 2002 *Budapest Open Access Initiative* (BOAI) extended open access to peer-reviewed journals. The *Bethesda Statement on Open Access Publishing* expanded OA to primary scientific literature. *Declarations on Access to Research Data from Public Funding* opened up access regimes for publicly funded literature. In 2005, the *Adelphi Charter on Creativity, Innovation and Intellectual Property* listed nine principles to facilitate the use of OA for scientific material.

To support the OA movement, a variety of OA policies have been endorsed by organisations world-wide. For instance, in the United Kingdom, the Digital Repositories development program<sup>21</sup> consists of 25 projects, aiming to facilitate academic researchers to share their

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<sup>19</sup> See “Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities” (Oct 22, 2003) available at, <http://www.zim.mpg.de/openaccess-berlin/berlindeclaration.html> .

<sup>20</sup> See Neil Jacobs, *Open Access: Key Strategic, Technical and Economic Aspects*, Oxford: Chandos Publishing Ltd. (2006). See also, David Soloman, *Developing Open Access Journals: a Practical Guide*, Oxford: Chandos Publishing Ltd. (2008).

<sup>21</sup> See Digital Repositories Development Program, available at, <http://digbid.com/4fyve>.

material. In Australia, the Australian Partnership<sup>22</sup> project seeks to enhance the operation and development of digital repositories.

The essential principle of the OA movement is to open up access to research and scholarship<sup>23</sup>. This movement can be regarded as a voluntary contribution model, given that the purpose of the movement is, to all intents, for rightsholders to release their copyright content to the public in furtherance of research and education. It also allows open access to work in the public domain. As James Boyle states, the movement is working towards academic contents not being “propertised”.<sup>24</sup> The following is a brief case study of Creative Commons licensing, in order to highlight the features of open content licences.

#### **5.1.2.2. Open Content Licensing: Creative Commons (CC) Case Study**

From a legal perspective, it is unlawful to reproduce or distribute copyright material unless such use is permitted by the copyrightsholder or authorised in certain circumstances. In the Open Access movement, a range of open content licences (OCL) have been developed to provide legal certainty to the act of sharing digital content and grant permissive rights to users, such as *AEShareNet Instant Licenses*<sup>25</sup>, *Design Science License*<sup>26</sup>, *GNU Free Documentation License*<sup>27</sup>, and *Open Publication License*<sup>28</sup>. The most prominent open content licensing system is the Creative Commons (CC) project established by Professor Lawrence Lessig in Stanford University in 2001.

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<sup>22</sup> See “Australian Partnership”, available at, <http://www.apsr.edu.au/>

<sup>23</sup> See *OAK Law Report Number 1: Creating a legal framework for copyright management of open access within the Australian academic and research sector*, Report for the Department of Education Science and Training (DEST), Australia (Aug 2006) at 91.[Hereinafter, *OAK Law Report Number 1*, in brief].

<sup>24</sup> See James Boyle, “The Second Enclosure Movement and the Construction of the Public Domain”, *Law and Contemporary Problems*, Vol.66 (33) (2003) at 33-73.

<sup>25</sup> “AEShareNet licensing system” simplifies and streamlines the licensing of learning materials through a series of standard license conditions called “licence protocols”. All *AEShareNet* licences are built on a common heading structure. Some protocols allow negotiation and customisation of conditions for an individual material or licensee and others do not. Available at, <http://www.aesharenets.com.au/coreBusiness/#Instant>

<sup>26</sup> See, *Design Science License*, available at, <http://www.gnu.org/licenses/dsl.html>.

<sup>27</sup> “GNU Free Documentation License (GNU FDL or simply GFDL)” is a [copyleft license](http://www.gnu.org/copyleft/fdl.html) for free documentation, designed by the [Free Software Foundation](http://www.gnu.org/copyleft/fdl.html) (FSF) for the [GNU project](http://www.gnu.org/copyleft/fdl.html), available at, <http://www.gnu.org/copyleft/fdl.html>.

<sup>28</sup> See, <http://opencontent.org/openpub/>.

Creative Commons (CC) is a project which aims to enable rightsholders to grant some of their rights to the public while retaining others through open content licensing protocols and thereby promote information reutilisation and dissemination for the purposes of creativity and innovation. The project provides a variety of free licenses which rightsholders can use when releasing their copyright works on websites. Through granting copyright in the content to the commons, the rightsholders can determine how, and to what degree, that content can be used by the public<sup>29</sup>. The project also provides RDF/XML metadata that can be used to describe the relationship between the license and the creative work, making the license status of the work machine-readable. In short, the CC idea is to “ask rightsholders to ‘licence out’ or distribute their material on the basis of protocols designed to enhance reusability and build on the information commons”.<sup>30</sup>

According to *Creative Commons licence Deed*,<sup>31</sup> two types of conditions are included in the CC licences. The first is the “baseline” rights and restrictions<sup>32</sup>, which are common to all CC licences. For example, licensees are granted the right to reproduce the work; to create and reproduce derivative works; to distribute, display and digitally perform the work; and, to transfer the work to another format<sup>33</sup>. Licensees may not use technological protection measures to restrict access to the work<sup>34</sup>. Copyright notices should always be attached to all copies of the work<sup>35</sup>. These basic conditions may be deployed with some other options, whether alone or in combination. According to the *Creative Commons Deed*, rightsholders are entitled to choose from among the following optional license conditions: non-commercial<sup>36</sup>, no derivative works<sup>37</sup>,

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<sup>29</sup> See Anne Fitzgerald and Brian Fitzgerald, *Intellectual Property in Principle*, Australia: Law Book Co. (2004) at 455.

<sup>30</sup> See *OAK Law Report Number 1*, supra note 23, at 110.

<sup>31</sup> See *Creative Commons licence Deed*, available at, <http://creativecommons.org/licenses/by-nc/2.0/>. (last accessed at Dec 4 2006).

<sup>32</sup> See *OAK Law Report Number 1*, supra note 23, at 110.

<sup>33</sup> See *OAK Law Report Number 1*, supra note 23, at 110.

<sup>34</sup> See *OAK Law Report Number 1*, supra note 23, at 110.

<sup>35</sup> See *OAK Law Report Number 1*, supra note 23, at 110.

<sup>36</sup> “Non-commercial” condition refers that others are permitted to copy, distribute, display and perform the copyright work, or make derivative works, as long as the use is for non-commercial purpose only. See, *Creative Commons licence Deed*, supra note 31.

<sup>37</sup> “No derivative work” condition means others are permitted to copy, distribute, display and perform only exact copies of the work, but not granted to make derivative works based upon the copyright work. See, *Creative Commons licence Deed*, supra note 31.



and share alike<sup>38</sup>.

### *Cases Related to the Creative Commons licence*

The Creative Commons was first tested in Court in *Curry v. Audax*,<sup>39</sup> in which podcaster Adam Curry sued a Dutch tabloid which published the photos licensed under the Creative Commons Non-commercial license but without permission from his Flickr page. The Court held that the defendant would be enjoined from publishing all copyright protected photos, on the ground that they failed to observe the conditions that control the use by third parties of the photos as stated in the CC licence. By examining Article 4 (a) and (c) of the Dutch CC licence which stipulate that “the user is not entitled to use the work for commercial purposes”,<sup>40</sup> the Court found that the photographer’s rights had been violated by the publication of their works in the magazine, which was a use for commercial purposes without the rightsholders’ consent and without granting a “share alike”<sup>41</sup> license. The Dutch Court decision is the first reported case where a court has ruled on the enforceability of a CC licence, confirming that the conditions mentioned in a Creative Commons licence “automatically apply to the content licensed under it, and bind users of such content even without expressly agreeing to, or having knowledge of, the conditions of the license”.<sup>42</sup>

Consequently, the debate on the validity of the CC licence has been carried on in some other jurisdictions. For instance, in *Sociedad General de Autores y Editores (SGAE) v. Ricardo Andres Utrera Fernandez*,<sup>43</sup> the Spanish Court held that “the document alleged by the defendant-

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<sup>38</sup> “Share alike” condition states that others may distribute derivative works only under a licence identical to that in the original work. See, *Creative Commons licence Deed*, supra note 31.

<sup>39</sup> See *Adam Curry v. Audax*, Amsterdam D.C. (March 9 2006), interim measure, 334492/KG 06-176 SR.

<sup>40</sup> See Article 4 of the *Full Term of Creative Commons licence*. Available at, <http://creativecommons.org/licenses/by-nc-sa/1.0/legalcode>.

<sup>41</sup> Ibid. See also, “The Creative Commons Legal Code --- Public License Attribution-Noncommercial ShareAlike 2.0 License”. Available at, <http://torrents.softwarelivre.org/COPYING.EN>.

<sup>42</sup> See *Creative Commons licence Upheld by Dutch Court*, Groklaw, available at, <http://www.groklaw.net/article.php?story=20060316052623594>. (March 16, 2006).

<sup>43</sup> See *Sociedad General de Autores y Editores (SGAE) v. Ricardo Andres Utrera Fernandez*, 761/2005, ruling nº 15/2.006. (In this case, SGAE sued Mr. Ricardo, the owner of Metropol, a disco bar in Badajoz, by alleging that he had failed to pay SGAE’s license fee for the public performance of music managed by the collecting society. The Court rejected SGAE’s claims on the ground that the owner of the bar questioned the validity of the SGAE as a representative for the music played in the bar.)

appellant in concept of free-music end user license represent only an informative piece of paper without any kind of signature, thus not representing any legally valuable act”.<sup>44</sup> In comparison, in the latest Spanish SGAE case which sued jazz club Birdland<sup>45</sup> for playing music in public locale without paying royalties, the judge-magistrate Luis Sanz Acosta upheld the validity of the CC licence:

*"...in recent years we have seen the rise of so-called "música libre" in our country, very much an Internet phenomenon as a medium for music distribution. From a distribution model very much circumscribed to the sale and rent of works, controlled by content industry, there is now an almost unlimited model, thanks to the global diffusion provided by the Internet, in which creators themselves, without industry intermediaries, can make digital copies of their work available to the public. This phenomenon has originated the coexistence of different content distribution models with regards to the new possibility offered by the Internet*

*a) The traditional model, based on copyright protection, which seeks to restrict access and use of online content, by using negotiating formulae of restrictive nature and technological control measures, expressed in the so-called "Digital Rights Management"*

*b) A model that provides free online access to content, on occasions allowing personal use (implicit licensing models), and in other situations, the free redistribution of the work, its transformation and even its public economic exploitation, with the only proviso of citing the source. These are models of public domain and general licences (General Public License), such as, for example, the Creative Commons licences, which include a copyleft clause.*

*With this copyleft clause, the owner allows, by means of a general public licence, the transformation or modification of his work, compelling the author of the modified work to make it available to the public with the same conditions, that is, allowing free access and further transformation. With the Creative Commons licences, the rights-holder reserves the right of economic exploitation and can forbid modifications. It is vital then to distinguish*

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<sup>44</sup> Ibid.

<sup>45</sup> See *Sociedad General de Autores y Editores(SGAE) v. establecimiento salmantino Birdland*, quoted from Andres Guadamuz, "Spanish Jazz Club Wins Case on Copyleft Claims", *TechnoLama* (May 15, 2007) available at, <http://technollama.blogspot.com/2007/05/spanish-jazz-club-wins-case-on-copyleft.html>.

*Creative Commons licences that have, and have not, the copyleft clause. In some instances there will be Creative Commons licences that include the copyleft clause (translation mine, traduttore = traditore).<sup>46</sup>*

The latest U.S. Creative Commons licence case, *Jacobson v. Katzer*,<sup>47</sup> further decided that CC licence is a valid contract rather than just a licence. Robert Jacobson participated in an open source project named *Java Model Railroad Interface (JMRI)*, with the conditional licence on attribution to the original source of the JMRI files. Matthew Katzer operating as KAM Industries incorporated parts of the JMRI in their software without any change in the original JMRI files. In the first instance, the District Court had misinterpreted the CC licence and alleged that there should be no presumption of a copyright infringement claim given that the defendant did not need to adhere to the CC licence terms. In August 2008, the U.S. Appeals Court changed the District Court decision, confirming that a copyrightsholder has the right to “grant the right to make certain modifications, yet retain his right to prevent other modifications [on his work]... Indeed, such a goal is exactly the purpose of adding conditions to a license grant”. Lessig summarised the ruling encouraging that conditions of a liberal licence are enforceable.<sup>48</sup> According to him,

*In non-technical terms, the Court has held that free licenses such as the CC licences set conditions (rather than covenants) on the use of copyrighted work. When you violate the condition, the license disappears, meaning you are simply a copyright infringer. This is the theory of the GPL and all CC licences. Put precisely, whether or not they are also contracts, they are copyright licenses which expire if you fail to abide by the terms of the license.*

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<sup>46</sup> Ibid.

<sup>47</sup> See *Robert Jacobson v. Matthew Katzer and Kamind Associates, Inc.*, No. 06-CV- 01905 JSW, 2007 WL 2358628 (N.D. Cal. Aug. 17, 2007). United States Court of Appeals for the Federal Circuit (2008-1001).

<sup>48</sup> See Lessig’s Blog, available at, <http://www.lessig.org/blog/>.

### *Pros and Cons of the CC Licence*

The CC licence is a promising answer to the problem of access to educational materials in the digital world, considering its potential to allow authors to give away their rights while limiting users from abusing this altruistic gift. With respect to advantages for higher and further education, freely and easily accessible research materials are valuable to researchers and educators, given that “the benefits of research are derived principally from access to research results”<sup>49</sup>. For academic authors, the Creative Commons enables more freedom in publishing by “lower[ing] the barriers to publishing [and] providing immediate worldwide e-dissemination at a lower cost”.<sup>50</sup> Compared to traditional publishing with delays sometimes amounting to months or years, the application of CC licences allows streamlining of the process. As the traditional licensing system works in paper-based publishing environment, so the practice of CC licences indicates a possibility that the transformed licensing model can be applied to online publishing world.

However, there are concerns with some inconsistencies of the open access licence. For instance, Nimmer asserts that self-proliferating licences create “incompatibilities”<sup>51</sup>, i.e., “the inability of one user to concurrently comply with the terms of two separate licences”<sup>52</sup>. A licence musician, Larry Rosen, complained, “I’m not bothered as much by ‘too many notes’ as I am by the fact that the notes aren’t always in the same key. Licence proliferation has become an important problem because software under those different licences cannot always be played consistently and compatibly everywhere. Perhaps ... we should throw out the off-key notes?”<sup>53</sup> As Benjamin Mako Hill mentions, the open access licences “set no defined limits and promises, no freedoms,

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<sup>49</sup> See Wellcome Trust, “Costs and Business Models in Scientific Research Publishing” (April 2005) available at, [http://www.wellcome.ac.uk/doc\\_wtd003185.html](http://www.wellcome.ac.uk/doc_wtd003185.html).

<sup>50</sup> See Jonathan D Wren, “Open Access and Openly Accessible: a study of scientific publications shared via the internet”, *BMJ*, Vol. 330 (2005) at 1128.

<sup>51</sup> See Raymond T. Nimmer, “Open Source License Proliferation, a broader view”, *Contemporary Intellectual Property, Licensing and Information Law* (2005) available at, <http://www.ipinfoblog.com/archives/licensing-law-issues-open-source-license-proliferation-a-broader-view.html>

<sup>52</sup> Ibid.

<sup>53</sup> Quoted from Nimmer, *Open Source License Proliferation*, supra note 51.

no rights, and no fixed qualities”<sup>54</sup>. The lack of clear standard that all CC licences grant confuses and hence confounds the use of OA licences in practice.

Secondly, the terms of CC licence does not provide a clear guidance on the situation where a work includes third party rights. This might include the use of photographs or images generated by third parties. The use of a work created by an employee can also be problematic. In most circumstances, the employer owns the rights in the work created by their employees. In such instances, academic employees cannot make their works available under a CC licence without the permission of the institution or the department. In addition, publisher rights may also affect the application of CC licences. For example, Social Science Research Network (SSRN), as an eLibrary supporting the Open Access movement, provides authors with the opportunity to “grant reuse rights through a Creative Commons or similar license embedded in an electronic file”.<sup>55</sup> Nevertheless, there is a charge to download some of the materials posted to SSRN if the materials are provided by publishers, “who typically retain copyright to the posted materials”<sup>56</sup>. In other words, users need to pay for accessing these materials even if their uses are for personal, non-commercial, research or educational purposes.

## 5.2. Evaluating the Voluntary Model: Free as in “Free Beer”<sup>57</sup>?

Optimists about Open Access believe that Open Access licensing is “the first time in history, human expression by default is subject to regulation”<sup>58</sup>, which substantially benefits science and

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<sup>54</sup> See Benjamin Mako Hill, “Towards a Standard of Freedom: Creative Commons and the Free Software Movement” (July 2005) available at, [http://mako.cc/writing/toward\\_a\\_standard\\_of\\_freedom.html](http://mako.cc/writing/toward_a_standard_of_freedom.html).

<sup>55</sup> See Social Science Research Network (SSRN) Terms of Use, available at, [http://ssrn.com/update/general/ssrn\\_faq.html#terms](http://ssrn.com/update/general/ssrn_faq.html#terms) (Access at Nov, 2007).

<sup>56</sup> Ibid.

<sup>57</sup> See, “Free as in beer” refers to things which are available at no monetary cost (like free beer at a party). By contrast, the expressions free as in speech, free as in freedom, and free as in rights, refer to something which is free of any and all restrictions, as in the freedom of speech. See, Lawrence Lessig, “Free, as in Beer”, *Wired*, Vol.14 (9) (Sep 2006). See also, Darren Wershler Henry, *Free as in speech and beer: open source, peer-to-peer and the economics of the online revolution*, Pearson Publications (2002).

<sup>58</sup> See Lawrence Lessig, “Mashups and the Law”, available at, <http://blogs.zdnet.com/BTL/?p=2614> (June 20, 2006). See also, Lawrence Lessig, *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*, New York: The Penguin Press (2004) [Hereinafter, *Free Culture*, in brief].

society, maximises impact, minimises redundancy, speeds scientific progress, makes content easy to access, and gives impetus to an alternative to the “permission culture”<sup>59</sup>. Clearly, the OA licensing system reflects the thought that rightsholders should grant some of their exclusive rights to the public in certain circumstances, such as for the purposes of research and education. However, when people are asked to give away something, a common question is “why would we want to share it for free?” In the following section, we will analyse on what basis people might wish to share digital content for free, and discuss the benefits and potential disadvantages of the OA licensing system.

### ***5.2.1. Advantages of the Voluntary Model***

The voluntary contribution model is theoretically justified by two empirical pieces of evidences. First of all, not all writers devote themselves fully to pecuniary gain. As Zimmerman describes, “artistic production is not only, and perhaps not even primarily, about money,[ ...] it is nevertheless unlikely that writers will devote ... to authorship as a profession if they cannot profit from the value that others place on their work”.<sup>60</sup> Secondly, some users do “cooperate, self-sacrifice, and provide charitable donations, .... [as well as] pay for products that [are] available free-of-charge”.<sup>61</sup> This is especially true of educational or academic users. For example, Lawrence Lessig released his book “*Free Culture*”<sup>62</sup> under a creative commons licence (CCL) on a website. Yet, many people still purchased the book. In her article “*Authorship without Ownership*”, Zimmerman states: “people contribute to television and radio, non-profit theatre groups, museums, and a wide variety of other cultural activities that could probably not survive without their voluntary support, even though in those cases ... they cannot

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<sup>59</sup> “Permission Culture”, as described by Lawrence Lessig, is the modern culture is the one “in which creators get to create only with the permission of the powerful, or of creators from the past”, and OA licenses can lessen traditional content distributors’ monopolies on cultural products. See, Lawrence Lessig, *Free Culture*, supra note 58, at 8.

<sup>60</sup> See Lawrence Lessig, *Free Culture*, supra note 58, at 1121.

<sup>61</sup> See Glynn S. Lunney Jr., “The Death of Copyright: Digital Technology, Private Copying, and the Digital Millennium Copyright Act”, *Virginia Law Review*, Vol. 87 (2003) at 813.

<sup>62</sup> See Lawrence Lessig, *Free Culture*, supra note 58. (The book was released on the Internet for free on March, 2004 under the CC Attribution/Non-commercial license).

exclude those who never pay a cent”.<sup>63</sup> Giving a cultural work away for free can also be a successful way to market the product, or associated products, for money. The success of *Player v. Player (PvP)*<sup>64</sup> cartoon, for example, demonstrates the market potential of the voluntary model.

#### **5.2.1.1. The Voluntary Model Serves the Public Interest**

In practice, the voluntary contribution scheme has potential to preserve a balance between social benefits and rightsholders’ interests. Let us consider the public interest with open access to educational and social information. First of all, the Open Access movement allows access to knowledge as an extension of the basic human right principle. International human rights law clearly supports greater access to knowledge. Such principles have been embodied in a number of declarations, conventions and covenants. For instance, article 17 of the *Convention on the Rights of a Child (CRC)*<sup>65</sup> states that children have access to information and material especially aimed at the promotion of the child’s social, spiritual and moral well-being and mental health. Article 26 of the *Universal Declaration of Human Rights (UDHR)*<sup>66</sup> recognises that everyone has the right to education. Article 27 of UDHR also confirms everyone’s right to freely participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits<sup>67</sup>. With the advent of the Internet, the OA licensing system is extending the human rights code even further, to include digital copyright content.

Secondly, open access to scholarly research is beneficial to economic and cultural development. Free online availability of information will expand academic information resources by enhancing academic communications, speeding scientific processes, and promoting social progress. Given open access to knowledge, researchers and scholars can reach any article on the

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<sup>63</sup> See Zimmerman, *supra* note 7, at 1150.

<sup>64</sup> “PvP”, known as *Player vs Player*, is an online comic written and drawn by author Scott Kurtz. By August 2005, it had around 100,000 unique visitors per day. As of February 1, 2007, it became the subject of its own animated series.

<sup>65</sup> See Convention on the Rights of the Child, General Assembly Resolution 44/25 (20 November, 1989).

<sup>66</sup> See Universal Declaration of Human Rights, General Assembly Resolution 217 A (III) (10 December, 1948).

<sup>67</sup> *Ibid.*

website, rather than just those provided in the particular journal that appears in certain libraries. Research funding agencies have long endeavoured to promote open access to the research they fund and support. For instance, the *U.S. National Institute of Health's Public Access Policy*<sup>68</sup> was enacted in 2005, which requested medical researchers provide an open access version online. In June 2005, the *Research Council UK (RCUK)* published a statement on *Access to Research Outputs policy*,<sup>69</sup> requiring immediate self-archiving through their institutional repositories. In April 2006, the Recommendation A1 of European Commission "*Study on the Economic and Technical Evolution of the Scientific Publication Markets in Europe*"<sup>70</sup> suggested that "Research funding agencies ... should establish a European policy mandating published articles arising from EC-funded research to be available after a given time period in open access archives".

This is especially important for developing countries. According to the World Bank Classification<sup>71</sup>, a developing countries' annual per capita income can range from: US\$825 or less (low income); US\$826–US\$3,255 (lower middle income) to US\$3,256 (upper middle income). Lack of funds and space makes it impossible for developing countries' libraries to subscribe to every scientific journal, a situation known as "the series crisis"<sup>72</sup>. Open access helps researchers and scholars obtain access to articles or journals which their libraries do not subscribe to. In addition, open access extends the domain of research "beyond academic"<sup>73</sup>. The readers of an open access article can be anyone: a professional in the field, a student, a writer, or anyone who is interested in exploring the topic. For example, one can easily read the scholarly literature about meningioma research on open access archives, rather than searching

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<sup>68</sup> See "The U.S. National Institute of Health's Public Access Policy" (May 2005) available at, <http://publicaccess.nih.gov/>. (Last accessed at 14/02/2007).

<sup>69</sup> See "Access to Research Outputs", the Research Council UK (June 2006) available at, <http://www.rcuk.ac.uk/research/outputs/access/2005.htm>. (Last accessed at 14/02/2007).

<sup>70</sup> See "Study on the Economic and Technical Evolution of the Scientific Publication Markets in Europe", *European Commission Research Paper*, available at, [http://ec.europa.eu/research/science-society/pdf/scientific-publication-study\\_en.pdf](http://ec.europa.eu/research/science-society/pdf/scientific-publication-study_en.pdf). (Last accessed at 14/02/2007).

<sup>71</sup> See "The World Bank Classification 2006", available at, <http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20420458~menuPK:64133156~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html>.

<sup>72</sup> See Lee C. Van Orsdel and Kathleen Born, "Choosing Sides: Periodical Price Survey 2005", *LibraryJournal.com*, available at, <http://www.libraryjournal.com/article/CA516819.html>.

<sup>73</sup> See Catherine Jones, *Institutional Repositories: Content and Culture in an Open Access Environment*, Oxford: Chandos Publishing Ltd. (2007).



thousands of books and articles in a medical library.

#### **5.2.1.2. The Voluntary Model Serves Authors' Interests**

Open access helps authors to enlarge the audience by their research. At a personal level, opening access to copyright protected works can enhance an authors' academic reputation. In 2004, Eysenbach compared citations to individual articles published in the journal "*Proceedings of the National Academy of Sciences*" (PNAS) with those published on open access archives. The research showed that between June 2004 and December 2004, open access articles were three times as likely to be cited as non-open access articles.<sup>74</sup> Establishing reputation is an important benefit for authors, especially for professional authors, which is indirectly related to the author's pecuniary benefits, such as being promoted or awarded merits. At an institutional level, open access to its research products enhances public funding potential for the institute. Of particular attention here is that open access works may be funded by state funds (i.e., by taxpayers). For instance, the Research Assessment Exercise (RAE)<sup>75</sup> is "to enable the higher education funding bodies to distribute public funds for research selectively on the basis of quality" in the UK. The citation rate of articles is a vital element when the RAE accesses the "quality" of research in higher education institutions.

#### **5.2.2. Scepticism about the Voluntary Model**

The obvious criticism of the voluntary model is why would authors choose to give away their works for free? In other words, an overwhelming concern about the voluntary model is whether the rightsholders would wish to share their works for free, namely, the status of the reward system for rightsholders. A number of surveys, articles and books<sup>76</sup> have deliberated on the

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<sup>74</sup> See Gunther Eysenbach, "Citation Advantage of Open Access Articles", *PloS Biology* (2006) available at, <http://biology.plosjournals.org/perlserv/?request=get-document&doi=10.1371%2Fjournal.pbio.0040157>.

<sup>75</sup> See "What is the RAE? RAE 2001", *HERO*, available at, <http://www.hero.ac.uk/rae/AboutUs>.

<sup>76</sup> See, Flora F. Tien, "To What Degree Does the Desire for Promotion Motivate Faculty to Perform Research? Testing the Expectancy Theory", *Research in Higher Education*, Vol.41 (6) (Dec 2000). See also, Alma Swan and Sheridan Brown, "What Authors Want: the ALPSP Research Study on the Motivations and Concerns of Contributors to Learned Journals", *Learned Publishing*, Vol.12 (3)

factors authors take into account when disseminating their works, such as career prospects, improved funding, enhanced prestige and financial reward. If rightsholders obtain no reward in the voluntary model, they probably will hesitate to effectively donate their work. This problem is expanded in detail in Part 5.4.4. below.

## 5.2 Comparison between the Public, Private and Voluntary Models

Each of the above models — the public<sup>77</sup>, private<sup>78</sup> and voluntary proposals — has its advantages and limitations, each targeting different compensation sources for rightsholders. The following is a brief illustration of how the four stakeholders — authors, rightsholders/publishers, file sharing intermediaries, and users— have benefited or been disadvantaged by the public, private and voluntary models. Such an exercise will usefully assist in understanding the role each model can play in restoring the balance between public interest and rightsholders’ benefits.

### 5.3.1 The Four Stakeholders

Initially it is relevant to consider the definition of the four interest groups in this chart.

According to the definition of the New Shorter Oxford English Dictionary (1993), the word “author” refers to “the writer of a book, article, or other text”, “one who practices writing as a profession”, “one who writes or constructs an electronic document or system, such as a website”, and “an originator or creator, as of a theory or plan”.<sup>79</sup> In the sense of copyright law, the author of a work means the person who creates the work<sup>80</sup>, including individual creators and special situations where more than one person is involved in the creation of the work<sup>81</sup>. The term in this

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(1999). See also, Michael A. Mabe, “What do Authors Care About: What over 50,000 STM Authors Tell Us Each Year”, available at, [digital.casalini.it/retreat/2003\\_docs/Mabe.ppt](http://digital.casalini.it/retreat/2003_docs/Mabe.ppt).

<sup>77</sup> See Chapter 4, Part 4.1, at 133.

<sup>78</sup> See Chapter 4, Part 4.2, at 166.

<sup>79</sup> See *New Shorter Oxford English Dictionary* (NSOED), New York: Oxford Publishing Ltd. (1993) at 92.

<sup>80</sup> See, e.g., Section 9(1) of Copyright, Design and Patent Act 1998 (CDPA) states that “author in relation to a work means the person who creates it”.

<sup>81</sup> See, e.g., Section 10 of CDPA states that “a work of joint authorship means a work produced by the collaboration of two or more authors in which the contribution of each author is not distinct from that of the other author or authors”.

chapter denotes the academic author, namely, the person who creates the work for research, education or any other academic uses, such as a professor who creates a textbook, a lecturer who produces class notes, or a researcher who produces an academic article.

Authorship and ownership have been long intertwined but are separated in copyright reality. The 1988 CDPA distinguishes the author of a work from the copyrightsholder of a work by declaring that “the author of a work is the first owner of copyright”<sup>82</sup>. In other words, although the author is the first owner of the work, it is possible for him or her to assign the copyright to a third party, i.e., the copyrightsholder of the work. As pointed out by Bently and Sherman, the copyright owner of a work during a specific period will “depend upon what has happened to the copyright since it was first created”<sup>83</sup>.

In the context of academic file sharing, the publisher and rightsholders perform the same role as a gatekeeper. It is noteworthy to distinguish an academic publisher from a commercial publisher. Commercial publisher describes “a corporate body whose function is that of publishing a work for profit”<sup>84</sup>. Maximising profits is a main priority for commercial publishers. By comparison, academic publishers may balance prestige in their role of distributing knowledge and research resources with an intention to obtain profits.

The definition of file sharing intermediaries has changed in the transformation from P2P entertainment file sharing to academic file sharing. As discussed in Chapter 1, digital file sharing includes web-based file sharing and Peer-to-Peer (P2P) file sharing. In P2P file sharing networks, digital files are stored in end-users’ personal computers and distributed from peers (i.e., end-users) to other peers. The first generation of P2P file sharing intermediaries, as exemplified by *Napster*,<sup>85</sup> had a centralised file index. This centralised file sharing feature

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<sup>82</sup> See Section 11(1) of CDPA 1988.

<sup>83</sup> See Lionel Bently and Brad Sherman, *Intellectual Property Law*, New York: Oxford University Press, 4<sup>th</sup> ed. (2003) at 117.

<sup>84</sup> See *New Shorter Oxford English Dictionary* (NSOED), New York: Oxford Publishing Ltd. (1993) at 92.

<sup>85</sup> See, *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004 (9<sup>th</sup> Cir. 2001). [Hereinafter, *Napster*, in brief].

ultimately leads to Napster's failure as "contributorily and vicariously liable for copyright infringement".<sup>86</sup> In order to avoid the legal complexities encountered by Napster, the second P2P-generation, such as Gnutella model, adopted a decentralised technical design.<sup>87</sup> The decentralised file sharing infrastructure separates file sharing intermediaries from content webhosts, resulting in a complete peer-to-peer file sharing network. By comparison, in academic file sharing the web-hosted file sharing deserves particular attention. Considering the reliability of contents shared through academic file sharing networks, certain quality control systems are expected. As exemplified by the Social Science Research Network (SSRN)<sup>88</sup>, a web hosting site can be a potential way to guarantee the quality of the materials in meeting academic standards.<sup>89</sup>

The users of copyright works are those who access copyright works. Copyright law traditionally distinguishes the different purposes of making use of copyright works, and concedes a privileged status to research and education. We should be mindful that, in the context of academic file sharing, authors can also be users. Like a researcher, authors have to take a close look at existing works during their creative process. As Geiger states, "[B]efore creating his work, an author also is a user"<sup>90</sup>. The loss of the privilege to legally make use of copyright works for research and education may have negative consequences for the creation of future works and thus hinder innovation. Some authors claim that it is necessary to provide a counterbalance between the interests of rightsholders and of users.<sup>91</sup> It is interesting to note that academic institutes especially can be seen as both rightsholders/publishers and users. On the one hand, academic

<sup>86</sup> See *Napster*, 114 F.Supp. 2d, at 919, 920, 1021.

<sup>87</sup> See Chapter 1, Part 1.1.2.3.2, at 19.

<sup>88</sup> See Social Science Research Network (SSRN) is "devoted to the rapid worldwide dissemination of social science research and is composed of a number of specialised research networks in each of the social sciences. The SSRN eLibrary consists of two parts: an Abstract Database containing abstracts on over 200,800 scholarly working papers and forthcoming papers and an Electronic Paper Collection currently containing over 162,200 downloadable full text documents in Adobe Acrobat pdf format. The eLibrary also includes the research papers of a number of fee based publication partners" Available at, <http://www.ssrn.com/index.cfm>

<sup>89</sup> See, e.g., Although SSRN encourages "the early distribution of research results" by authors, SSEP "reserves the right to modify or remove any material from the website". Also, SSRN encourages the scholarly communication to evaluate and improve the article's significance. See "Social Science Research Network" (SSRN) Terms of Use, available at, [http://ssrn.com/update/general/ssrn\\_faq.html#terms](http://ssrn.com/update/general/ssrn_faq.html#terms). (Access at Nov, 2007).

<sup>90</sup> See Christophe Geiger, "Copyright and Free Access to Information: for a Fair Balance of Interests in a Globalised World", *E.I.P.R.* Vol.28 (78) (2006) at 366-373.

<sup>91</sup> See Thomas Riis, "Users' Rights: Reconstructing Copyright Policy on Utilitarian Grounds", *E.I.P.R.* Vol.29 (1) (2007) at 1-5.

institutes may be either rightsholders or academic publishers, since they employ authors (i.e., professors, lecturers and research assistants) to create academic works. Meanwhile, academic institutes are also users who must purchase copyright works to support their staff and student teaching, studying and research. Academic institutes thus indirectly both generate and utilise copyright works.

### **5.3.2 Analysis**

Let us review how the public, the private and the voluntary model which we considered in the previous chapter have influenced the four interest groups.

#### **5.3.2.1. Authors**

Regarding authors, the primary incentive for their creation is generally taken to be profit. The application of both public levies and private contract models benefits authors by providing monetary compensation. With the use of the public model, money due by levies is collected by collecting societies or governments and distributed to authors<sup>92</sup>. In the private model, market price collected through contracts or licences is allocated to authors.<sup>93</sup> Compared to the flat rate prearranged in the public model, authors may obtain more in reward in the private way by controlling market price directly. In this comparison, the voluntary model requires academic authors to give away, in monetary terms, their copyright works. This highlights that authors are unable to substantially benefit from the voluntary model. Although pecuniary compensation is an important factor to motivate authors' creation, it could well be the case that some authors,<sup>94</sup> especially academics and educational scholars, are not ultimately motivated by monetary earnings but rather by different objectives, such as the author's desire to share his ideas, the expectation to be a personage, or the requirement of his job.<sup>95</sup> In this sense, the voluntary model brings authors some non-financial gains, such as being promoted, gaining reputation, obtaining awards, or lowering barriers, for example time, to publication.

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<sup>92</sup> See Chapter 4.1.4, at 152.

<sup>93</sup> See Chapter 4.2.2, at 168.

<sup>94</sup> See, e.g., the Lessig and Stephen King's experiments, *supra* note 17.

<sup>95</sup> See David Throsby, *A Work-preference Model of Artist Labour Supply: Cultural Economics and Cultural Policies*, Springer Publisher, 1<sup>st</sup> ed. (1994).

### **5.3.2.2. Publishers/ Rightsholders**

Regarding potential impacts, publishers and rightsholders benefit monetarily from the public and private models. In these two cases, both publishers and rightsholders receive the money collected by levies or contracts/licences.<sup>96</sup> Compared to the flat rate in the public model, publishers and rightsholders may prefer the private model. Meantime, legalising private uses of copyright works helps to increase audience for the works, in addition to obtaining monetary rewards for publishers and rightsholders. Compared to these two models, the situation in the voluntary model is more complicated. Releasing academic materials for free potentially encourages academic publishers by increasing audience.<sup>97</sup> On the other hand, the commercial publishers in general are devoted, by their company nature, towards making profits. Authors who are willing to give works away for free may come into conflict with publishers who are not. The issue whether and how commercial publishers are still necessary in a world of academic file sharing will be discussed in the next subpart.

### **5.3.2.3. Users**

What users generally desire is cheaper and easier access to copyright works. In voluntary model practice, users of educational materials are enabled easy access to academic information. As special groups of users, academic authors and institutes are able to obtain copyright works at a lower price or even for free, which helps to decrease educational costs and promotes authors' creation. The public model offers better access to information by permitting private use of copyright protected works. However, academic users may lose out on "fair use" rights in a public levy system. The public levy model requires the payment of a levy on digital media and services. In other words, every user of digital equipment is charged for his use of the machine, whether the use is "fair" or not, which damages certain users' existing educational use right.<sup>98</sup> Likewise, academic users may be compromised with the application of the private model, on the

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<sup>96</sup> See Chapter 4.1 and 4.2, at 133-174.

<sup>97</sup> Compared to the commercial publisher who is extremely profit-centered, academic publishers are devoted to distributing academic research and scholarship. Most academic publishers, such as university presses, rely on public funding or institute supports.

<sup>98</sup> See Chapter 4.1, at 133.

grounds that they have no choice but to pay the market price required by contracts or licenses.<sup>99</sup> Even though copyright law exceptions provide certain lawful users with an opportunity to fairly access to copyright materials, fair use is not always available because of the application of DRM<sup>100</sup> technology and/or restrictive contract terms (as in iTunes)<sup>101</sup>.

#### **5.3.2.4. File Sharing Intermediaries**

The impact on file sharing intermediaries deserves particular attention as these technology providers have been major targets in the entertainment file sharing lawsuits as discussed above<sup>102</sup>. Firstly, in the voluntary model, we assume that file sharing intermediaries are not directed towards issues of collecting pecuniary profits for themselves, aiming to create an environment enabling enhanced access to academic information.

Secondly, the focus of attention in the private model lies in the transformation from academic use into a pay-for-use system.<sup>103</sup> By selling copyright protected materials, rightsholders are entitled to derive pecuniary compensation from usage of their works. Thus the compulsory payment releases file sharing intermediaries from copyright liability for their users' conducts.

Thirdly, file sharing intermediary liability issue in the public model is less related to the model as a whole, and more to the specific levy policy being deployed.<sup>104</sup> Fisher's theoretical model is an example. Fisher provides a "governmentally administered reward model"<sup>105</sup> to recompense rightsholders. According to this model, a creator wishing to collect revenue for usage of his copyright works needs to register the work with the Copyright Office<sup>106</sup>. With registration, the digital copy of work would be assigned "a unique file name, which would be used to track

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<sup>99</sup> See Chapter 4.2, at 166.

<sup>100</sup> "Digital Right Management" (DRM) refers to "access control" technologies used by publishers and rightsholders to limit usage of digital media or devices. It may also refer to restrictions associated with specific instances of digital works or devices". See, Joan Van Tassel, *Digital Rights Management: Protecting and Monetising Content*, Focal Press, 1<sup>st</sup> Ed. (April 2006).

<sup>101</sup> See Chapter 4.2, at 166.

<sup>102</sup> See Chapter 4.2, at 166.

<sup>103</sup> See Chapter 4.2, at 166.

<sup>104</sup> See Chapter 4.1, at 133.

<sup>105</sup> See William W. Fisher, *Promises to Keep: Technology, Law and the Future of Entertainment*, California: Stanford Law and Politics Press, 1<sup>st</sup> ed. (2004) at 202.

<sup>106</sup> Ibid.

transmissions of digital copies of the work”<sup>107</sup>. Through taxes or levies on purchasing digital recordable audio or visual-audio media, the government would thus collect money to compensate registrants for permitting the public to access their works. Using techniques pioneered by American and European performing rights organisations and television rating services, a government agency would estimate the frequency with which each song and film was heard or watched by consumers. Each registrant would then periodically be paid by the agency a share of the tax revenues proportional to the relative popularity of his or her creation<sup>108</sup>. In Fisher’s system, he radically advocates the abolition of copyright law “to eliminate most of the current prohibitions on unauthorised reproduction, distribution, adaptation, and performance of audio and video recordings, [so that] music and movies would thus be readily available, legally, for free”<sup>109</sup>. Thus, in this ideal copyright levy world, file sharing intermediaries are not liable for copyright infringing activities because everything is “legally for free”. This is a particularly innovative model of the “voluntary way”, showing how file sharing might be encouraged without being unfair to rightsholders. Whether and how this theoretical proposal can be put into practice needs further analysis.

Compared to Fisher’s scheme, the existing public model as exemplified by the German pre-2008 public levy system<sup>110</sup> demonstrates that file sharing intermediaries in Germany remain potentially liable for the infringing activities of their users. The German government implemented a levy system on purchases of recordable media before 2008, in exchange for legally copying copyright protected works.<sup>111</sup> This policy was based on the notion that “an individual’s private sphere must be free from claims of copyright infringement”<sup>112</sup>, which excluded file sharing intermediaries as they were not individuals. German national courts had repeatedly decided that to manufacture and distribute a device or service with the intention of helping third parties access copyright protected works could be considered as secondary

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<sup>107</sup> Ibid.

<sup>108</sup> Ibid.

<sup>109</sup> Ibid.

<sup>110</sup> See Chapter 4, Part 4.1.3.2, at 141.

<sup>111</sup> See Chapter 4, Part 4.1.3.2, at 141.

<sup>112</sup> As quoted and translated by Katerina Gaita and Andrew F. Christie, “Principle or Compromise? Understanding the Original Thinking Behind Statutory Licence and Levy Schemes for Private Copying”, *I.P.Q.*, Vol. 422 (2004).



infringement. For instance, in *Firma Teleclub GmbH v. Firma Manfred Haas GmbH*,<sup>113</sup> the Court held contributorily liable the provider of the means to copy, based upon the premise that the device could be used to infringe copyright.

In other existing public levy schemes, such as the U.S. private copying scheme<sup>114</sup>, the liability of file sharing intermediaries is more determined on a case-to-case basis. The Court will decide whether the technology intermediary should be liable for his users copying activities. This flexible private copying scheme is relatively unpredictable and incoherent. For instance, time-shifting, as sought in *Sony*<sup>115</sup>, was held by the U.S. Supreme Court as a fair use. Compared to the *Sony* decision, in *Napster*<sup>116</sup> the defence of space-shifting was rejected for a P2P intermediary, and thus *Napster* P2P technology was not deemed fair use.

Overall, although not perfect, the voluntary model seems the best-fitting of the models we have considered in this Part, if we focus on the interests of the academic user and author as being paramount. This leaves, however, the problem of the intermediary or publisher's interest to be further considered below.

### 5.3.3 Illustration

**Figure 1.** Summary of advantages and disadvantages of the Public, Private and Voluntary Model

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<sup>113</sup> See *Firma Teleclub GmbH v. Firma Manfred Haas GmbH*, Oberlandesgericht Munchen (Court of Appeal), 19 March 1992, 29 U 4370/91. (Mentioned in M.Lehmann, German Report, ALAI Study Days, June 1996, Otto Cramwinckel, 1997).

<sup>114</sup> See Chapter 4.1.3, at 137-152.

<sup>115</sup> See *Sony Corp. of America v. Universal City Studios, Inc.*, 480 F. supp 429 (D.D.Cal 1979), rev'd 659 F 2d 963 (9<sup>th</sup> Cir 1981), rev'd 464 US 417 (1984) [Hereinafter, *Sony*, in brief].

<sup>116</sup> See *Napster*, supra note 85, at 4229.

	<i>The Public Model</i>	<i>The Private Model</i>	<i>The Voluntary Model</i>
Authors	<p>1. Money due by levies (flat rate only) is collected by collecting societies or governments, and distributed to authors; (see 4.1.4)</p> <p>2. Increasing audience. (see 4.1.4)</p>	Market price collected through contracts or licenses is distributed to authors. (see 4.2)	Authors obtaining non-financial benefits, such as being promoted, obtaining monetary awards, obtaining reputation, attracting public funds, and speeding publication. (see 5.2)
Rightholders / Publishers	<p>1. Money due by levies (flat rate only) is collected by collecting societies or governments, and distributed to rightholders / publishers; (see 4.1.4)</p> <p>2. Increasing audience. (see 4.1.4)</p>	Market price collected through contracts or licenses is distributed to rightholders / publishers. (see 4.2)	<p>1. Academic publishers obtain some other kinds of benefits, e.g., increasing audience, improved prestige. (see 5.2)</p> <p>2. Commercial publishers derive no benefit from the voluntary model. (see 5.2)</p>
The File sharing Intermediary	<p>Results varies according to levy models:</p> <p>1. e.g, in Fisher's levy model, file sharing intermediaries are not liable for any copyright infringement;</p> <p>2. e.g., in German private copying levy system allows private copying activities, but technology intermediaries are still liable for secondary infringement (see 4.1.3.2)</p> <p>3. e.g., intermediaries' liability is applied on a case-to-case basis in US practice.</p>	Transformation to a paying model makes private copying legal and thus intermediaries legal. (see 4.2)	File sharing intermediaries are not liable for copyright infringement; and information-sharing is legalised, which can be a potential solution for academic file sharing.
Users	<p>1. Legalised access to copyright works;</p> <p>2. Academic users lose certain existing free "fair use" of academic resources.</p>	Possible loss of fair use for academic users when access to information at market price is not affordable (see 4.2.3)	Good access to information, less costly, faster communication. (see 5.2)

## 5.4 A Life Design of the Voluntary Model

As we have seen from the above illustration, users, file sharing intermediaries and most authors adopting the voluntary model in academic file sharing would be favourably disposed to this strategy as it provides users with easy access to academic sources, offers authors faster publication opportunities, and relieves file sharing intermediaries from copyright infringing responsibility. However, there are some who suffer detriment in this situation, such as commercial publishers and some authors who would not prefer to give their works away for free. Below we will address this issue.

### 5.4.1. *Rough Ideas around the Voluntary Model*

It would seem that the current commercial publishing system, given its profit motivation, is not positioned to cope with the challenges of the voluntary model. Designing an effective and efficient voluntary model merits consideration of the following projects: What role would there be for commercial publishers in this new environment; and which method is best in order to collect and distribute sufficient compensation for authors.

One might begin by asking what need there is for commercial publishers in the context of academic file sharing? In the academic authoring community, monetary profit is not usually the primary concern as academic endeavours are generally separately funded. Instead, researchers and educators require avenues for the reliable communication of research results. To some degree, academic resources are similar to “public goods”<sup>117</sup> which need support and protection

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<sup>117</sup> See “public goods”, is frequently used in the language of economics to mean non-excludable and non-rivalrous characteristics in the consumption of the good. It is linked to two features in accessing and consuming the good. Firstly, a public good can be supplied to multiple parties without diminishing or limiting the utility available to other users; namely, public goods exhibit non-rivalness. For example, if someone eats an apple, there will be no apple left for others; but breathing in air does not significantly prevent others from inhaling fresh air at the same time. Secondly, once a public good is produced, it is impossible to exclude any individual from using it. It therefore follows that public goods are non-excludable. A prominent example is the free-rider problem inherently within the public goods, which means consumers can take advantage of the good without paying for it. See, Kezar, Anthony C. Chamber and John C. Burkhardt, *Higher Education for the Public Good: Emerging Voices form a National Movement*, Jossey-Bass Publishers, 1<sup>st</sup> ed. (2005). See also, Harold Demsetz, “The Private Production of Public Goods”, *Journal of Law and Economics*, Vol. 13 (1970) at 293-306. See, Richard A. Posner, *Economics Analysis of Law*, 2<sup>nd</sup> ed. (1977) at 11-12. See also, Markovitz, “The Causes and Policy Significance of Pareto Resource Misallocation: A Checklist for

from non-profit organisations. The commercial publisher, with incentives for maximising profits, has the potential to obstruct academic file sharing by diminishing the resources provided for academic users, and additionally increasing budget pressure within research and education. Maureen Ryan questions the issue of valuing knowledge by market interest.<sup>118</sup> According to her, identifying valuable academic works is very important for research and education regarding the quality and utility of various works. The market interest consideration of commercial publishers could lead a trend of publishing works on the basis of profit-maximisation. Thus, “publication choices may become business decisions based on whether the original work has further merchandising value”.<sup>119</sup> Hence, commercial publishers seeking the widest consumer base may “favour projects that conform to prevailing views of the academic community and depreciate more unorthodox projects which challenge received wisdom”<sup>120</sup>. Therefore, it follows that such publication decisions may distort the development of research and scholarship by driving academia towards work with “commercial value”, preventing social knowledge from substantial development<sup>121</sup>. At the same time, the advent of the Internet and digital technology makes electronic delivery of academic research resources not only possible, but also preferable in many aspects. Digital file sharing is able to provision fast and easy access mechanisms, and de facto create a commercial publisher-free area where academic authors may share their own works and make use of others’ works freely.

On the issue of compensation, electronic publication may generate extra benefits for scholarly authors, for instance, by establishing a citation rank database which allows authors to prove their work is read and used. The problem of how to compensate authors to a level sufficient to encourage them to “release” their copyright protected works for free will be discussed in detail in the next section.

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Micro-Economics Policy Analysis”, *Stanford Law Review*, Vol. 28 (1975) at 1.

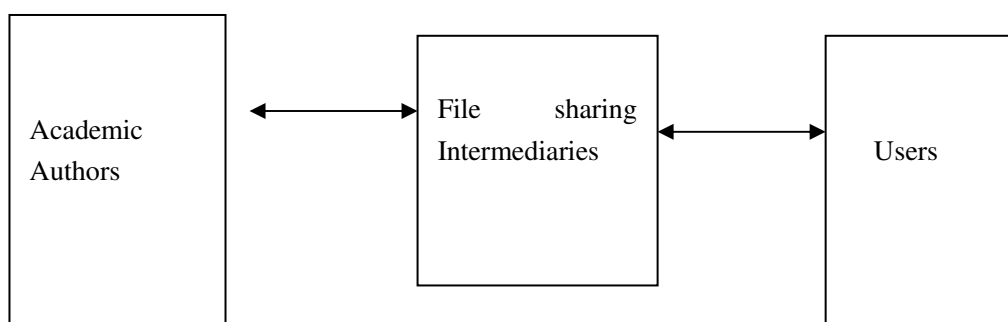
<sup>118</sup> See Maureen Ryan, “Fair Use and Academic Expression: Rhetoric, Reality and Restriction on Academic Freedom”, *Cornell Journal of Law and Public Policy*, Issue 8 (1999) at 541.

<sup>119</sup> See Ryan, *supra* note 118. See also, Neil Netanel, “Copyright Alienability Restrictions and the Enhancement of Author Autonomy: A Normative Evaluation”, *Rutgers Law Journal*, Vol. 24 (1993) at 435-440.

<sup>120</sup> See Ryan, *supra* note 118.

<sup>121</sup> See Ryan, *supra* note 118.

From above, we note that the role of the commercial publishers must be evaluated critically, perhaps even fundamentally, when establishing an effective voluntary model in practice. Thanks to the Internet and digital technology development, academic information may be shared on a non-proprietary platform between authors and users directly. Hence, it is possible for the commercial publisher to be excluded within the context of academic file sharing. Accordingly, in a basic outline, a voluntary model can be composed of authors, users and file sharing intermediaries. Such a model allows for academic contents to be uploaded to file sharing networks and be maintained independently by authors. Once the scholarly contents are registered on the file sharing networks, users will have free access to the contents, while in return they are required to connect their works to each paper they cite via a citation database programme, such as the Open Citation Linking Project (the OpCit Project)<sup>122</sup>. This model also exempts file sharing intermediaries from copyright infringing liability, as they create a platform enabling voluntary academic information sharing, without obtaining pecuniary benefit from the networks. File sharing technology is altering the fundamental structure of scholarly communication. As displayed in Figure 2 below, traditional academic communication may be replaced by a system of academic authors, cooperating file sharing intermediaries, and users.



**Figure 2.** Outline of a Voluntary Model

#### ***5.4.2. Scepticism about the Design***

In practice, research and education file sharing is more complex than the simplified outline of

<sup>122</sup> See Steve Hitchcock and Donna Bergmark, “Open Citation Linking: The Way Forward”, *D-Lib Magazine*, Vol. 8 (10) (2002) available at, <http://www.dlib.org/dlib/october02/hitchcock/10hitchcock.html>.

the voluntary model above. As mentioned in Part 5.2.2, the design of voluntary model presents challenges and concerns in the context of research and education. To assuage any scepticism, the following seeks to discuss motivations of rightsholders to release their copyright protected works voluntarily; and the issues behind that which guarantees the reliability of research and education materials shared through file sharing networks. Knowledge of the reasons behind these issues will assist our understanding of the necessary process towards effectively promoting a feasible voluntary model for academic file sharing.

Initially we can explore cultural issues, i.e., how the development of file sharing results in a different societal culture. A considerable amount of literature, ranging from Castells' "Network Information Society"<sup>123</sup> to Bell's "Post-Industrial Society"<sup>124</sup>, has been focused on this issue. According to Castells, in the information age the networks fundamentally changed the hierarchised and circumscribed social relationships through the setting up of an interactive network system. The co-ordinated interaction within these centralised or decentralised networks led to a tendency of globalisation in societal culture and economy.<sup>125</sup> The most distinctive feature in this network society was "to be or not to be in the network".<sup>126</sup> Similarly, Benkler proposed that there existed two information societies, namely, the *Industrial Information Economy* and the *Networked Information Economy*. The latter had engendered a social and economic revolution by promoting the role of non-market elements in the information and cultural production sector. As a result, the new *Networked Information Economy* promoted a culture of sharing, leading to the recent open access movement.<sup>127</sup>

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<sup>123</sup> Manuel Castells, *The Information Age: Economy Society, Culture: The Rise of the Network Society*, 2<sup>nd</sup> ed. Oxford: Blackwell (2000). See also, Manuel Castells, "Information Technology, Globalization and Social Development", *UNRISD Discussion Paper*, No. 114 (1999). Available at, [http://www.unrisd.org/80256B3C005BCCF9/\(httpAuxPages\)/F270E0C066F3DE7780256B67005B728C/\\$file/dp114.pdf](http://www.unrisd.org/80256B3C005BCCF9/(httpAuxPages)/F270E0C066F3DE7780256B67005B728C/$file/dp114.pdf).

<sup>124</sup> Daniel Bell, *The Coming of Post-Industrial Society*, New York: Harper Colophon Books (1974).

<sup>125</sup> See Castells, *supra* note 123.

<sup>126</sup> *Ibid.*

<sup>127</sup> Yochai Benkler, "Freedom in the Commons: Towards a Political Economy of Information", 52 *DUKE L J*, at 1245. See also, Yochai Benkler, "Sharing Nicely: On Shareable Goods and the Emergence of Sharing as a Modality of Economic Production", 114 *Yale L J*, at 273. See also, Yochai Benkler, "Coase's Penguin, or, Linux and the Nature of the Firm", 112 *Yale L J*, at 369.

Similar arguments also existed in Coombe's work on collaborative authoring<sup>128</sup> and Bowery's "Network Culture" theory,<sup>129</sup> indicating the impact of the network society in the context of research and education. Coombe asserted that the development of networks challenged the conventional Intellectual Property by the nature of authorship of cultural products being transformed because authorship in the context of networks was created by co-operation of people working in networks rather than individuals.<sup>130</sup> In his book "*Law and Internet Cultures*", Bowery pointed out that technologies were "one of the forms of social and cultural regulation".<sup>131</sup> The failure of law to recognise and protect the fast, globalised process of cultural production would restrain both the business and cultural development, especially collaboration within academic networks outside of proprietary interests.<sup>132</sup> As Paliwala stated, in the context of research and education "the geography of learning is changing from a situation in which the individual academic creates and delivers her course to students to one which is increasingly the result of collaboration between groups of teachers, librarians and technologies".<sup>133</sup>

Borrowing Roosendaal and Guerts's four components of scholarly communication theory<sup>134</sup>, we will analyse how the network society influences the scholarly communication. Roosendaal and

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<sup>128</sup> Rosemary Coombe, *The Cultural Life of Intellectual Properties: Authorship, Appropriation and the Law*, London: Duke University Press (1998).

<sup>129</sup> Kathy Bowery, *Law & Internet Cultures*, Cambridge: Cambridge University Press (2005).

<sup>130</sup> See Coombe, supra note 128.

<sup>131</sup> See Bowery, supra note 129, at 141.

<sup>132</sup> Ibid.

<sup>133</sup> Abdul Paliwala, "Space Time and (e)Motions of Learning, in Burrige", R. et al eds, *Effective Learning and Teaching in Law*, London: ILT Kogan-Page, at 184-204.

<sup>134</sup> See Hans E. Roosendaal and Peter A. Th. M. Geurts, "Forces and Functions in Scientific Communication: An Analysis of Their Interplay", *CRISP 97 Cooperative Research Information Systems in Physics*, available at, <http://www.physik.uni-oldenburg.de/conferences/crisp97/roosendaal.pdf>. Some other scholars have mentioned similar theory about scholarly communication components. See Michael A. Mabe, "What do Authors Care About? What over 50,000 STM Authors Tell Us Each Year", *ELSEVIER*, at 12. (In his presentation, Mabe stated that registration, certification, dissemination, archive and navigation are the fundamental elements of scholarly publishing. See also, David Posser, "Open Access and Open Archives: The Future of Scholarly Communication", *Scholarly Publishing and Academic Resources Coalition*, SPARC Europe (Posser presented that scholarly communication involves four functions, i.e., registration, certification, awareness and archiving) available at, [file:///C:/Documents%20and%20Settings/yueyue/Local%20Settings/Temporary%20Internet%20Files/Content.IE5/Y8QDZHGG/SPARC\\_Goth2%5B1%5D.ppt#258.1](file:///C:/Documents%20and%20Settings/yueyue/Local%20Settings/Temporary%20Internet%20Files/Content.IE5/Y8QDZHGG/SPARC_Goth2%5B1%5D.ppt#258.1), *SCHOLARLY PUBLISHING & ACADEMIC RESOURCES COALITION, SPARC EUROPE*. See also, Iva Melinščak Zlodi and Ivana Pažur, "Possible Models of Scholarly Publishing and Library Role", *Rudjer Boskovic Institute Library* (Zagreb, Croatia) available at, <http://eprints.relis.org/archive/00000582/01/handout.pdf>. (They argue that scholarly communication comprises four essential components: registration, certification, awareness and archiving).

Guerts suggest that the “familiar, linear scientific information chain”<sup>135</sup> is being transformed into an “interactive scientific communication network”<sup>136</sup> in response to developments in technology. They assert that this development “calls for new ways of knowledge management”, which “in turn have consequences for scientific communication”.<sup>137</sup> They emphasise that academic communication is based on four main forces and their interplay, namely, *registration*, *archive*, *certification* and *awareness*.<sup>138</sup>

*Registration* is a legal formality to establish a public record of the basic facts of a particular copyright. The main purpose of registration is to obtain the intellectual priority of research with the exception of the intellectual property aspect of integrity of the communication and copyright issues. In the EU/UK environment, copyright is secured automatically when the work is created. In other words, no publication or registration or other action is required in order to obtain copyright.<sup>139</sup> There are, however, certain definite advantages of registration for rightsholders’ benefits in U.S copyright law. For instance, US copyright law provides certain inducement to encourage rightsholders to register their works, such as registration establishing “a public record of the copyright claim”, setting “prima facie evidence in court of the validity of the copyright”, and preventing “the importation of infringing protection”.<sup>140</sup>

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<sup>135</sup> Ibid.

<sup>136</sup> Ibid.

<sup>137</sup> Ibid.

<sup>138</sup> In their article, Rossendaal and Geurts define the four communication elements by example of the birth of the first research journals, *Le Journal des Sçavans* (Paris) and the *Philosophical Transactions* by the Royal Society of London. According to them, “one may assume that the main reason for the birth of these journals was the growth of scientific activity in the seventeenth century and the concomitant break down of the author driven communication system of that time of writing letters reporting their recent research results to author-selected readers, and of writing compilations of their work in the form of a book. As a result relevant readers were not evenly informed and the scientific enterprise got out of phase resulting in a loss of effectiveness and efficiency. Thus the birth of the journal was primarily *awareness driven*. It should be noted that this was assisted by the important technological developments that allowed the deployment of an efficient postal system in Western Europe at that time. Thus one might see the birth of the journal also as technology driven, however technology seems more a necessary facilitator than a boundary condition. By organising the editorial office by appointing Mr Henry Oldenburg as the journal’s editor and by having the submitted articles reviewed by members of the Council of the Society, it was the Royal Society that took charge of the *registration* and *certification* functions, whereas the journal developed itself quickly as the *archive per se*”. See supra note 123.

<sup>139</sup> See e.g., the US copyright law provides certain inducement to encourage rightsholders to register their works, such as registration establishes “a public record of the copyright claim”, sets “prima facie evidence in court of the validity of the copyright”, and prevents “the importation of infringing protection”. See the *U.S. Code of Federal Regulations (CFR)*, Title 37 *Patents, Trademarks and Copyright*, Subchapter A, *Copyright Office and Procedure*, § 202.3.

<sup>140</sup> See the *U.S. Code of Federal Regulations (CFR)*, Title 37 *Patents, Trademarks and Copyright*,



Comparatively, the rightsholders suffer much less in the voluntary model than in traditional circumstances without registration procedure. In fact, rightsholders who share their academic works through file sharing networks have little to lose. One of the most important characteristics of the voluntary model is that authors choose to fully share their works among academic community for free. As rightsholders have no intention of obtaining direct pecuniary interests in the voluntary model, registration would not be regarded as a component procedure.

*Archive* is the “warehouses of information”<sup>141</sup>, aiming to preserve the intellectual heritage for future use. For academic file sharing archives, one of the practical issues is how to regulate the e-content lifetime. To define the period of time the archive conserves access to the full text of academic resources, three methods have been used: the archive conserves the e-content for a limited period<sup>142</sup>; the period is unlimited<sup>143</sup>; the e-content is cancelled from the archive after the paper-based edition is published<sup>144</sup>. Whatever method may be deployed by file sharing intermediaries, it is not a difficult technical problem to create electronic archives of academic contents under their control.

A key question which remains unresolved in academic file sharing practice is whether the content, which provides academic resources to researchers and educators, is reliable; namely, the issue of content certification, also known as quality control. According to Roosendaal and Geurts, *certification* refers to the way in which the quality and validity of research resources is justified. This has been a continuously controversial topic in academic circles. In traditional copyright environment, peer-review, known as refereeing in some academic areas, is the most common process of subjecting a scholarly work or research result to the scrutiny of others who are experts in the field. The fundamental purpose of peer-review is to present a reliable

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Subchapter A, *Copyright Office and Procedure*, § 202.3.

<sup>141</sup> See Hans E. Roosendaal and Peter A. Th. M. Geurts, *Forces and Functions in Scientific Communication: An Analysis of Their Interplay*, supra note 123.

<sup>142</sup> See, e.g., the American Mathematical Society (AMS) and the American Physical Society (APS) allow their e-print archives keep the academic information for a limited period of two years.

<sup>143</sup> See e.g., the European Laboratory of Particle Physics (CERN) and the Los Alamos National Laboratory (LANL) do not indicate the e-print lifetime in their archives.

<sup>144</sup> See e.g., the Department of Mathematics of the University of Texas, the Department of Economics of the University of Washington allows their employees to keep the academic content in their archives until its formal publication.

certification for academic quality with reference to special expertise or experience, given the difficulties for an individual author or research team to spot every mistake or flaw in a complex piece of work. Previously, in paper-based media, the task of reviewing an article typically fell to an academic professional chosen by the editor, for example, a scientist or a professor. The authors and reviewers, who work as volunteers, might be located anywhere in the world. Thus an established benefit for the traditional refereeing system was implicit within their credentials as professional experts; the referees' reputation was and is an important element for users to determine the validity and hence acceptability of the information. Conversely, in the context of academic digital file sharing, a major obstacle to more widespread acceptance of the new communication method is users' scepticism about the authenticity and credibility of information distributed through the Internet. This is due to the ease with which material may be accessed, interacted with, and published on the Internet, in turn increasing the risk of ingress of inexperienced or corruptive opinions into academic networks. Where a student is entitled to share the academic contents on a file sharing network freely, he can be expected to express his idea or even publish his articles on this network more easily than before. It then follows that some immature or wrong ideas may be disseminated on the file sharing networks, with the potential to mislead other users. According to a report by Amy Friedlander<sup>145</sup>, most Internet-based information users worry about the accuracy of information: 19% only reference known sources, 14% check with alternative sources, 13% trust the author, 9% trust the sponsoring organisation or publisher, 9% trust the website provider, and 7% only reference academic sources provided by an accredited institution.<sup>146</sup> These figures indicate that the quality of data is a crucial point in developing the voluntary model.

The *awareness* issue also needs to be considered carefully when sharing academic information, on the ground that it is the "real engine"<sup>147</sup> in the academic communication process. The users' awareness has a positive impact on academic communication, as it ensures dissemination and

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<sup>145</sup> See Amy Friedlander, "Dimensions and Use of the Scholarly Information Environment: Introduction to a Data Set Assembled by the Digital Library Federation and Outsell, Inc.", *Digital Library Federation and Council on Library and Information Resources* (November 2002) available at, <http://www.clir.org/PUBS/reports/pub110/contents.html>.

<sup>146</sup> Ibid. See Table 81, Table 84, Table 44 and Table 55.

<sup>147</sup> See Bently and Sherman, *supra* note 83, at 117.

accessibility of research, and encourages authors' incentives for creation. In traditional copyright environment, monetary reward is an important element to quantify users' awareness of the work. For example, the sales performance of a book indicates how popular it is. In the voluntary model, there is the lack of an accepted effective method of benchmarking to test users are accessing the "best" materials. Some online ranking systems have been deployed in current practice, such as Google Scholar's ranking system. However, the effect of this ranking system is still unclear and probably still in evolution. In Part 5.4.4., the issue of whether, and how to insert the ranking method into file sharing practice will be analysed.

As indicated above, Roosendaal and Guerts suggest that the structure of academic communication consists of four elements: registration, archive, certification, and awareness.<sup>148</sup> The operation of the system involves interaction between these factors: submission of an article starts certification and can be the final registration if the article is published as it is. Revisions arising from certification may lead to registration, while rejection leads to lifting the existing registration. Certification increases awareness; in turn, awareness can increase the value of certification.<sup>149</sup> Quality control and calculating users' awareness of the contents are major problems for academic file sharing to be engaged in the digital milieu.

### ***5.4.3 Completing the Design: The Quality Control Issue***

If there has seen to be a need to control the quality and validity of the academic content<sup>150</sup>, it is relevant to ask whether the file sharing intermediaries are equipped with sufficient capability to control the quality control process enabling users to trust the content?

At least three solutions have been adopted to control the quality of content shared through academic file sharing networks.

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<sup>148</sup> See supra note 123.

<sup>149</sup> See supra note 123.

<sup>150</sup> See Part 5.4.2, at 202-208.

#### 5.4.3.1. Online Journal with *Traditional* Peer-Review: *SCRIPT-ed*

Online journals have existed for a number of years. Could, or should an online journal system be instituted to compensate academic authors? Will the content in online journals be reliable? Such a solution constitutes a replica of conventional peer-review system. Similar to the peer-review procedure in the context of traditional publishing environment, online journals adopt a process of “subjecting an author’s scholarly work or ideas to the scrutiny of others who are experts in the field”<sup>151</sup>. As mentioned in Chapter 1.2.2.2.<sup>152</sup>, *SCRIPT-ed* is a typical example of an online journal with “traditional” peer review system.

This peer-review solution, as traditionally applied in the offline world, has its own advantages. At its best, the quality of the content is reliable. A rationale for peer review is that the higher the referee’s academic level, the higher the article’s status; the higher the status and the more reliable the information.<sup>153</sup> The long-term trust placed in the journal and referees’ reputations offers users the confidence to make use of the information. As Ann Weller points out, editorial peer review “can foster innovation without sacrificing quality and can build a body of literature that truly makes a contribution to the field”.<sup>154</sup>

#### 5.4.3.2. Open Peer Editing and Review: *Amazon* and *Wikipedia*

The idea of open peer review originates from *Amazon*, which permits users to review articles and reviews online. The idea of open peer review is to converge a high quality review with a sufficient number of users and reviewers, leading to detailed rating and high quality data. The concept has been used successfully to produce bug-free software.<sup>155</sup> As Raymond states, “given

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<sup>151</sup> See Susan van Rooyen, Fiona Godlee, Stephen Evans, Nick Black and Richard Smith, “Effect of Open Peer Review on Quality of Reviews and on Reviewers’ Recommendations: A Randomised Trial”, *BMJ* Vol.318 (1999) at 23-27.

<sup>152</sup> See Chapter 1, Part 1.2.2.2., at 40.

<sup>153</sup> See. Roosendaal and Geurts, [supra note 123](#).

<sup>154</sup> See Ann C. Weller, “Editorial Peer Review: Its Strengths and Weaknesses”, *Assi and T Monograph Series, Information Today* (2001).

<sup>155</sup> See Jackson Sanders, “Linux, Open Source and Software’s Future”, *Software IEEE*, Vol. 15(5) (1998) at 88-91.

enough eyeballs, all bugs are shallow”.<sup>156</sup> The reviewers can be anonymous or named, but the distinctive feature of the system is that the reviewers are volunteers rather than being selected by editors. This dynamic peer review system offers readers a guide to what they read, and makes it easy to identify whether a work is “worthy” in content or not. The first systematic experiment involving open peer review was the *Wikipedia*<sup>157</sup> project. The aim of *Wikipedia* is to “see if public volunteers, each working for a few minutes here and there can do some routine science analysis that would normally be done by a scientist or graduate student working for months on end”.<sup>158</sup> *Wikipedia* combines three main characteristics: First, it is an open, peer-produced model. Anyone is able to contribute and to change any page in the entire project. Second, it is based on a self-conscious collaboration. All the content in this project are “governed ... by a collective informal undertaking to strive for a neutral point of view”.<sup>159</sup> Third, the content is released under the GNU Free Documentation License,<sup>160</sup> a license designed for authors to voluntarily share their creations and documentations. This open, peer-produced strategy proved successful. According to a survey by Yochai Benkler, there was enormous growth in both the number of contributors and articles between 2001 to 2005 (See Figure 3 below).<sup>161</sup>

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<sup>156</sup> See Eric S. Raymond, “The Cathedral and the Bazaar” (1999) available at, <http://www.catb.org/~esr/writings/cathedral-bazaar/cathedral-bazaar/>.

<sup>157</sup> See <http://www.wikipedia.org>.

<sup>158</sup> See “Welcome to the clickworkers’ study: NASA Ames’s Experiment in Voluntary Science”, available at, <http://clickworkers.arc.nasa.gov/detailed>.

<sup>159</sup> See Yochai Benkler, *The Wealth of Networks: How Social Production Transforms Markets and Freedom*, London: Yale University Press (2006) at 71-73.

<sup>160</sup> “GNU Free Documentation License”, similar to the CC licence, is a [copyleft license](#) for free documentation, designed by the [Free Software Foundation](#) (FSF) for the [GNU](#) project. It is the counterpart to the [GNU GPL](#) that gives readers the same rights to copy, redistribute and modify a work and requires all copies and derivatives to be available under the same license. Copies may also be sold commercially, but if produced in larger quantities (greater than 100) then the original document or source code must be made available to the work's recipient. Available at, [www.gnu.org/licenses/fdl.html](http://www.gnu.org/licenses/fdl.html).

<sup>161</sup> See Yochai Benkler, *supra* note 159.

	Jan 2001	Jan 2002	Jan 2003	Jan 2004	June 2005
Contributors	10	472	2,188	9,653	48,721
Active Contributors	9	212	846	3,228	16,945
Very active contributors	0	31	190	692	3,016
No. of English language articles	25	16,000	101,000	190,000	630,000
No. of articles, all languages	25	19,000	138,000	409,000	1,600,000

Figure 3. Contributors to Wikipedia, January 2001 --- June 2005<sup>162</sup>

However, the content certification issue on Wikipedia's model deserves particular attention. Without traditional professional referees' review, do the Wikipedia voluntary reviewers actually get things right each time? Lack of certification of the content may deter some academic users from trusting this open peer editing and review system.

#### 5.4.3.3. Dynamic Peer-Review and Aggregated Reputation Indices<sup>163</sup>: *Slashdot*

Aiming to improve the content certification issue on *Wikipedia*'s model, a new online wiki encyclopedia named *Citizendium*<sup>164</sup> was launched on March 2007. To become involved in *Citizendium*, a user must first register as an author. Authors are entitled to apply to become editors. Editor applications must be verified openly, for transparency and publicly accepted authority.<sup>165</sup> By requiring contributors to register with their real names and adding "gentle expert oversight", *Citizendium* is the first online wiki-based encyclopedia which intends to lead a new "expert-led, not expert-only"<sup>166</sup> project.

<sup>162</sup> See Yochai Benkler, *supra* note 159.

<sup>163</sup> "Dynamic peer-review" refers to a content evaluation system which is not just an "adjust/eject" decision by the editor, but a mechanism providing users an opportunity to evaluation the articles and the reviews. See C.J. Garrison, *L.V. Murrow Floating Bridge study, task 4, dynamic analysis: Peer review*, Arvid Grant Associates (1991).

<sup>164</sup> See <http://www.citizendium.org>.

<sup>165</sup> See Larry Sanger, "Toward a New Compendium of Knowledge", *Citizendium* (Sep 15, 2006) available at, <http://citizendium.org/essay.html>.

<sup>166</sup> *Ibid.*

Slashdot, also known as /.,<sup>167</sup> is another design featuring user-submitted and editor-evaluated scientific information. The content in Slashdot is generally submitted by its users with editors accepting or rejecting comment posters. Of particular attention in Slashdot is its accreditation of users' comments system. *Slashdot* allows users to submit comments which are displayed together with original posters. An automated moderation system has been implemented to give every comment posted a score. As such, the moderation points constitute the users' "karma"<sup>168</sup> points. Positive karma increases the rating of a comment and negative karma decreases the rating. The idea behind a Karma project has led to an interesting endeavour to encourage users' dynamic peer-review, while preventing abusive comments.

Let us take *Community Patent Review Project* in America as an example to explain how a dynamic peer review system works in particular areas. The *Community Patent Review Project* has been adopted by the United States Patent and Trademark Office, in order to "improv[e] the quality of issued patents by providing patent examiners access to better information through an open network for community peer review of patent applications".<sup>169</sup> The dynamic peer review introduced in the project has been carried out in two ways: *Firstly*, the system allows users to submit prior art and commentary in response to published patent application, aiming at collecting information from a variety of sources other than the limited books produced by elite few. *Secondly*, the *Community Patent Review project* software requires participating reviewers to rate and rank the information. By summarising the rating results, the software creates a rank-ordered list of citations.

Proponents of the *community patent review project* insist that the dynamic peer-review benefits the patent review process. Based on the rationale that "expertise is not centralised but distributed

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<sup>167</sup> See <http://slashdot.org/>.

<sup>168</sup> "Karma", means a number assigned to a user that primarily reflects whether he or she has posted good or bad comments. There are certain criteria of moderating a user, such as they must be logged in with their real names, they must be regular users, they must have been using the site for a while, they must be willing, and they must have positive Karma. See, Yochai Benkler, *supra* note 159.

<sup>169</sup> See "The Peer to Patent Project: Community Patent Review", *New York Law School Institute for Information Law and Policy* (Dec 20, 2006) available at, <http://dotank.nyls.edu/communitypatent>. At 366.

in the minds of those with the requisite knowledge”,<sup>170</sup> they argue that the proposal creates a new mechanism, potentially enabling groups with the knowledge derived from ordinary people’s experience to be a new source of certification beyond those contained in traditional published works. According to them, dynamic peer-review reflects a shift in the authority of knowledge in patent review process through identifying ideas and decisions which people work together with on the network. Robert Berring refers that “information is in the midst of great change, a change not just in formats, but in the authority structure of the materials”<sup>171</sup>. In other words, dynamic peer-review changes refereeing from a closed, anonymous system involving only a few appointed professionals, to an open process in which many ordinary peers (or persons) participate. Thus, in the context of community patent review, it is “not what experts are actually thinking that is sought and trusted, but what they have thought and what others have then considered and then preserved”.<sup>172</sup>

The dynamic peer-review system may work in particular areas such as the patent review process. However, as discussed in *Part 5.4.3.4.*, the feasibility of generalising the dynamic peer-review for scholarly content deserves further consideration, given the fact that academic peer review significantly differs from patent review for the specific requirement of precise and professional knowledge and experiments.

#### **5.4.3.4. Assessment**

Each of these three strategies has its own disadvantages:

The first solution— *online journal with traditional peer-review system* — as in the conventional peer-review system, can be expensive to set up and run, slow, prone to bias, potentially anti-innovatory, and may fail to spot plagiarism or fraud.<sup>173</sup> Inherently, the peer-review system

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<sup>170</sup> Ibid.

<sup>171</sup> See Robert C. Berring, “Legal Information and the Search for Cognitive Authority”, *California Law Review*, Vol. 88 (2000) at 1673-1675.

<sup>172</sup> See Ethan Katsh and Beth Noveck, “Peer to Peer Meets the World of Legal Information: Encountering a New Paradigm”, *Law Library Journal*, Vol. 99 (2) (2005).

<sup>173</sup> See Rick Weiss, “Many Scientists Admit to Misconduct: Degrees of Deception Vary in Poll”,



suffers from low efficiency. In practice, it “typically takes several months or even several years in some fields for a submitted paper to appear in print”.<sup>174</sup> Secondly, some argue that traditional peer review leads to bias and suppression. The referees’ personal preference may suppress dissent against “mainstream” theories<sup>175</sup>. For example, referees tend to be more critical to the articles which contradict their own views, and prefer those which accord with them. The peer review process may also result in the control of publishing by elites. It is generally recognised that elite scholars are more likely to be chosen as referees. Thus, as pointed by Sophie Petit-Zeman, ideas harmonising with the elite’s normally have more chance of being published.<sup>176</sup> Thirdly, another risk of peer review is that fraud may not be detected during peer review, due to the lack of access to raw data for reviewers.

The second strategy — *open peer editing and review* — leaves the content production and evaluation completely to individual users, which immediately presents a concern about the quality of information in this model. How can we make sure the content produced by widely dispersed individuals is trustworthy? In practice, *Wikipedia* has not been broadly accepted in academia as a formal resource. Some educational institutions have limited or even blocked *Wikipedia*.<sup>177</sup>

For the third system, i.e., *dynamic peer-review*, there is a concern about whether the open dynamic review system can work as efficiently in academic scientific review as it does in patent review. Academic peer review is markedly different from patent review. One of the most important elements of scientific review is the requirement for professional knowledge. A scientific article which is not professionally reviewed is either unimaginable or untrustworthy.

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*Washington Post* (June 9, 2005) at A03.

<sup>174</sup> See Richard Smith, “Peer Review: Reform or Revolution?” *BMJ*, Vol. 315 (2005).

<sup>175</sup> See e.g., Brian Martin, “Suppression Stories”, *Intellectual Dissent*, Australia (1997); See also, Juan Miguel Campanario, “Rejecting Nobel Class Articles and Resisting Nobel Class Discoveries”, *Nature*, Vol.425 (6959) (2003) at 645. See also, Juan Miguel Campanario and Brian Martin, “Challenging Dominant Physics Paradigms”, *Journal of Scientific Exploration*, Vol. 18(3) (2004) at 421-438.

<sup>176</sup> See Sophie Petit-Zeman, “Trial by Peers Comes up Short”, *The Guardian* (Jan 16, 2003).

<sup>177</sup> See Lysa Chen, “Several Colleges Push to Ban Wikipedia as Resource”, *The Chronicle Online* (March 28, 2007) available at, <http://media.www.dukechronicle.com/media/storage/paper884/news/2007/03/28/News/Several.Colleges.Push.To.Ban.Wikipedia.As.Resource-2809247.shtml>.

Professional knowledge is established in time and in long-term research in a specific field. All the documents and data relating to a proposed article must be examined not only via the referees' professional knowledge, but also through experimental procedure. As the relevant scientific information, in most cases, is based on precise and professional experiments, there is neither compulsion nor opportunity for the public to have access to raw data. As far as their professional abilities are concerned, the public in the main would not be a capable or appropriate party to verify research and educational contents.

#### **5.4.3.5. An Alternative Quality Control System**

The insufficiencies of the first three approaches indicate that we should consider a fundamental change in the quality control system. Specifically, this thesis proposes that we replace the conventional individual review model with an institutional repository system. In brief, such a system might work as follows: A scholar who wishes to disseminate his work through academic file sharing network would register it with the institutional repository mechanism, such as university, research organisation or scientific department repositories. These institutional repositories archive the professional works from their scholars, and join the academic communication as a unity. Each institution is responsible for evaluating the professional works in the repository. The work up to academic standards is granted a unique filename, regarded to be symbolic of reliable academic contents.

In the following, let us examine Eprints as an existing example for sharing research and educational content to demonstrate how such an institutional repository system might work within the voluntary model.

Eprints<sup>178</sup>, also known as GNU Eprints, was originally developed by Paul Ginsparg at Los

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<sup>178</sup> The term *Eprints file* has been defined in different ways. Some prefer a broad way that "Eprints could be anything from electronic books or theses to digital images". (For example, see Oxford University Library Service about the Eprints Archive, available at, <http://eprints.ouls.ox.ac.uk/faq.html>.) Some others strictly limit the term to "author-self archived electronic document". E.g., Simeon Warner, "Eprints and the Open Archives Initiative", *Library High Technology*, Vol.21 (2) (2003) at 151-158. In this thesis, I use the general definition of *Eprints*, which

Alamos National Laboratory in 1991. Currently, Eprints is a network where peers are institutional repositories (such as universities) which certify that the information hosted in the network is constituted from real works from their scholars. Being “a pun on preprint” in its early age, Eprints “has been rehabilitated to mean a collection of digital documents either in draft or final form self-archived by the author”.<sup>179</sup> At present, there are more than 200 known archives running Eprints software worldwide<sup>180</sup>, involving almost all academic research fields. Eprints can be regarded as a voluntary model, as it provides authors with a platform to disseminate work for free, while avoiding access-restrictions for users.

Current Eprints archives are managed by three types of institutional repositories: scientific organisations, research establishments and university departments. These three repositories archive most scholarly and professional works shared in academic Eprints networks. Besides general dynamic peer review process, it is noteworthy that Eprints archives use a “branding” system to certify the content in their repositories. The branding information includes an icon and a link associated with the icon, such as the home page of the originating repository. The linked icon can be displayed by the file sharing intermediaries. For example, as shown in Figure 4, Professor Lilian Edwards’s article “*Dawn of the Death of Distributed Denial of Service*” was originally published in *Cardozo Art and Entertainment Law Journal* (Vol 24, Issue 1). When being collected in *e-Prints Soton*, the article is branded as a work certificated by University of Southampton. Thus, certification of the article comes from trusted academic source, such as Southampton University in this case.

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includes digital documents, such as articles, pre-prints, scientific reports, books, theses and dissertations, being shared and open access to full-text via Internet. *Eprint Archive* means the repository of digital documents, for example, a digital library or electronic journal.

<sup>179</sup> See Archives of [American-Scientist-Open-Access-Forum@Listserver.Sigmaxi.Org](mailto:American-Scientist-Open-Access-Forum@Listserver.Sigmaxi.Org), September American Scientist Forum, available at, <http://amsci-forum.amsci.org/archives/American-Scientist-Open-Access-Forum.html>.

<sup>180</sup> See <http://www.edshare.soton.ac.uk/>.



**Figure 4.** *Eprints Soton Example*

As an early stage trial of the institutional repository, the *e-Prints Soton* brands the works as having been created by their employed scholars. Although future work to develop the details of this approach would be required, there are at least two reasons why qualified contents in institutional repositories are promising. For one thing, compared to *Wikipedia* in which content is produced by wide spectrum of individuals, institutionally administered quality control system emphasises that the material is certified by experts in the fields since being employed as they are by a reputable institution. Generally speaking, institutional research output is funded by direct or indirect government support and other research grants. That is to highlight that researchers' time and efforts are paid by government. With public financial support, institutions are capable of taking effective steps to examine the quality and validity of academic information, especially those which require deep scientific, subject-matter expertise. Greater adoption of the academic standard may help support the projection of repository identities and increase acceptance of qualified information. Consideration of their academic reputation may guarantee the academic authors' works reliable and cogent.

Secondly, sharing academic materials through institutional repositories benefits not only users

but also authors as well as academic institutes. As discussed above<sup>181</sup>, in the context of academic file sharing authors are also users when relying on existing works during their creative process. The role of institutional repositories is to represent the professional researchers' working results with employers' permission; meanwhile, it encourages academic institutes to support their staffs and students access to knowledge in a cheaper and more efficient way. By doing so, it allows professionals more freedom to decide whether, when and how to share their creative works while benefiting academic institutes. Academic contents would thus be readily available, reliable, and free.

#### ***5.4.4. Completing the Design: The Awareness/ Recognition Issue***

The other important issue deserving of particular attention is that, if it is necessary to compensate authors in return for their sharing works for free among research and education community, will the file sharing intermediaries be able to provide authors with sufficient non-monetary compensation?

In order to examine the issue of rewarding authors, we should begin by examining the expectation of authors. It is generally recognised that academic authors expect two kinds of rewards for their creation: non-profit benefits and monetary compensation. The former includes research impact, promotion, employment, tenure, grants and prestige. The latter refers to monetary awards, prizes, or funds. For most academic authors, it is asserted that the non-profit benefit is the more important issue. As Harnad's survey<sup>182</sup> on free online full-text access article indicates, not one of the authors, among the 2 million annually who offer articles for free online access, seeks royalties or fees in exchange for their text. All they seek is to distribute their works as extensively as possible. Hence, some technical mechanisms may help to measure the usage of academic papers or articles disseminated on academic file sharing networks.

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<sup>181</sup> See Chapter 5, Part 5.3.1, at 193.

<sup>182</sup> See Stevan Harnad, "Eprints: Electronic Preprints and Postprints", *Encyclopedia of Library and Information Science*, Marcel Dekker, Inc. (2003) available at, <http://www.ecs.soton.ac.uk/~harnad/Temp/eprints.htm>.

The “*Open Citation Project*” is a feasible tool to measure academic use of scholarly papers. The Project is a collaboration between Southampton University, Cornell University and arXiv, which grew out of an early demonstration of tools “to add links, post-authoring, to references contained in scholarly papers in Web-deliverable formats”<sup>183</sup>. The basic idea was to link papers on the websites by requiring automatic recognition and collection of references contained in these papers. Since the *Citebase*<sup>184</sup> project started up in 1998, the open citation project has progressed from early reference linking to a web-based citation and impact-ranking search service. In other words, for a given paper, the number of times it has been referenced can be determined, and from this emerges the ability to measure impact. This technical mechanism has been used widely to support online academic communication, for example, the Eprints.org software deployed within this project for building Open Archive Initiative (OAI)-compliant archives<sup>185</sup>. This proposed system has many advantages in the pursuit of recognising and rewarding academic authors and institutions.

The Open Citation system helps achieve academic authors’ non-profit benefits in the following way. Author A disseminated his article about a new form of high-speed DVD ROM through an academic file sharing network. Author B quoted A’s article and developed the idea of A’s article in his new work, producing a substantially advanced mechanism. Author C critically adopted B’s theory and created a second, more superior system. Thus, the *Open Citation Project* helps to link the works of A, B and C, and determines the number of times their works have been referenced, as a way to measure the impact of their works.

The Citebase impact-rank system generated by this process is assumed to be valid as a benchmark of the popularity of the work and, it follows, the author’s reputation. Firstly, Citation indices system may measure quality of the work. Citation indices system has been widely

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<sup>183</sup> See Steve Hitchcock and Donna Bergmark, “Open Citation Linking: The Way Forward”, *D-Lib Magazine*, Vol. 8 (10) (2002) available at, <http://www.dlib.org/dlib/october02/hitchcock/10hitchcock.html>.

<sup>184</sup> “Citibase” is a statistical tool for online information statistics, available at, <http://statlab.stat.yale.edu/help/ssda/helpfiles/citiwin.jsp>.

<sup>185</sup> The Open Archives Initiative (OAI) is an attempt to build a "low-barrier interoperability framework" for archives with digital materials. It allows people (Service Providers) to harvest metadata (from Data Providers). This metadata is used to provide "value-added services", often by combining different data sets. Available at, [http://en.wikipedia.org/wiki/Open\\_Archive\\_Initiative](http://en.wikipedia.org/wiki/Open_Archive_Initiative).

deployed in some disciplinary repositories. For instance, the Social Science Research Network (SSRN) repository features papers and abstracts for political science and the humanities. SSRN CiteReader is a citation index that tracks not only the abstract but also the download. Since 1994 there have been deposited “over 15,000 full-text documents from more than 90,000 authors”.<sup>186</sup> There have been “more than 21 million downloads” and the top author “may boast more than 300,000 downloads, [while] No. 10 has more than 80,000 and No. 50 has more than 32,000 downloads”.<sup>187</sup> For the top paper there are “more than 64,000 downloads”, while “No. 10 more than 22,000 and No. 50 more than 7,900”.<sup>188</sup> Such a meaningful usage metrics demonstrates that citation indices by collective peer process may indicate quality (as on SSRN Top 10 articles by downloads). Secondly, the Citation rate may subsequently influence the author’s other non-monetary interests, such as being promoted, or enhancing his academic reputation. Additionally, citation rate can also be adopted to measure the research capability of an academic institution. According to a report from the New Zealand Tertiary Education Advisory Commission (TEAC),<sup>189</sup> 50% of the available research and educational funding had been allocated on the basis of “the results of periodic assessments” by expert panels of the quality of the research produced by eligible staff in 2001. As the Research Assessment Exercise (RAE)<sup>190</sup> demonstrates, when the higher education funding bodies distribute public funds for research throughout the UK, the research paper citation rate is also an important element to be considered.

Some scholars advocate that institutional repository bibliometric evaluation is a promising way to evaluate research and education. Jonathan Adams cites the experience of the Netherlands and argues that “[based on the bibliometric evaluation], Dutch researchers responded by improving their publication practices and output, and citation rates shot up, placing the Netherlands’ index values among world leaders.”<sup>191</sup> It is also proposed that institutional repositories may be

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<sup>186</sup> See Chris Armbruster, “Access, Usage and Citation Metrics: What Function for Digital Libraries and Repositories in Research Evaluation?” Available at:

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1088453](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1088453)

<sup>187</sup> Ibid.

<sup>188</sup> Ibid.

<sup>189</sup> See Jonathan Boston, Brenden Mischewski and Roger Smyth, “[Performance-based Research Fund--implications for Research in the Social Sciences and Social Policy](#)”, *Social Policy Journal of New Zealand* (March, 2005).

<sup>190</sup> See <http://www.rae.ac.uk>.

<sup>191</sup> See Janathan Adams, "Consistency confirms strength of UK research", *Research Fortnight* (11

pursued if a worldwide academic cooperation can be effected. Armbruster suggests that adopting the citation indices idea to open access institutional repositories requires that institutions cooperate together, developing standards for metadata that identify author, item and institution in a single way, which impact may be tracked worldwide.<sup>192</sup>

#### **5.4.5. Who Will Pay for the Bill?**

The institutional repository quality control system involves financial consideration, such as the costs in creating and maintaining an institutional repository, making “primary sources” accessible and rewarding authors for their contributions. How will digital information delivery through institutional repositories be funded?

Financial support to the institutional repository may be regarded as similar to that in the traditional education and research area. Among the possibilities are:

- *Government financial support.* Government funding on a national, regional or international scale could support research and educational information dissemination. For instance, the UK’s higher education funding councils and the Department for Employment and Learning Northern Ireland are responsible for allocating funding to higher education institutions in line with their own strategic objectives.<sup>193</sup> Higher Education Funding Council for England (HEFCE),<sup>194</sup> Higher Education Funding Council for Wales (HEFCW)<sup>195</sup> and Scottish Funding Council (SFC)<sup>196</sup> are the bodies responsible for distributing public money for higher education in England, Wales and Scotland. There are other government funding bodies from many different sources, such

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October 2006).

<sup>192</sup> See Armbruster, *supra* note 186.

<sup>193</sup> [http://www.hero.ac.uk/uk/inside\\_he/he\\_funding\\_and\\_support/uk\\_higher\\_education\\_funding\\_councils.cfm](http://www.hero.ac.uk/uk/inside_he/he_funding_and_support/uk_higher_education_funding_councils.cfm)

<sup>194</sup> Higher Education Funding Council for England (HEFCE), available at, <http://www.hefce.ac.uk/>

<sup>195</sup> Higher Education Funding Council for Wales (HEFCW), available at, <http://www.hefcw.ac.uk/>

<sup>196</sup> Scottish Funding Council (SFC), available at, <http://www.sfc.ac.uk/>.



as Joint Information Systems Committee (JISC),<sup>197</sup> Arts and Humanities Research Board (AHRB),<sup>198</sup> the British Academy,<sup>199</sup> the Royal Academy of Engineering,<sup>200</sup> and the Wellcome Trust.<sup>201</sup>

- *Research grants support.* Research foundations are also important sources for research and educational activities. For instance, each year the U.K. Research Councils<sup>202</sup> invest around £2.8 billion in innovative and original research projects of high quality and potential, covering the full spectrum of academic disciplines from the medical and biological sciences to astronomy, physics, chemistry and engineering, social sciences, economics, environmental sciences and the arts and humanities.
- *Institutions pay the costs.* Steve Harnad argues that digital publication will be more and more affordable for institutions to be enabled to support free information dissemination.<sup>203</sup> Similar to offsite research projects, institutional repositories may be treated as academic communication projects supported by institutional research and educational funds.
- *Advertising.* Although advertising has rarely seemed important in the economics of research and education, there is certainly a potential market for Internet advertising. According to the latest report from the UK Internet Advertising Bureau, UK marketers spent £1.7 billion during first half of 2008 on online advertising, which speed up Internet advertising 21% despite an economic downturn.<sup>204</sup> If online advertising could be introduced to the institutional repository effectively, it may constitute a substantial part of total institutional repository budgets. The potential *advertising* in an institutional

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<sup>197</sup> Joint Information Systems Committee (JISC), available at, <http://www.jisc.ac.uk/>

<sup>198</sup> Arts and Humanities Research Board (AHRB), available at, <http://www.ahrc.ac.uk/Pages/default.aspx>

<sup>199</sup> The British Academy, available at, <http://www.britac.ac.uk/>.

<sup>200</sup> The Royal Academy of Engineering, available at, <http://www.raeng.org.uk/>

<sup>201</sup> The Wellcome Trust, available at, <http://www.wellcome.ac.uk/>

<sup>202</sup> The U.K. Research Councils, available at, <http://www.rcuk.ac.uk/default.htm>.

<sup>203</sup> See Steve Harnad, "Online Publication", available at, <http://www.ecs.soton.ac.uk/~harnad/intpub.html>.

<sup>204</sup> See the Internet Advertising Bureau UK site (October 7, 2008) available at, <http://www.iabuk.net/en/1/internetadvertisingspendup21071008.mxs>.

repository system may be attractive for traditional donors, such that research grants and educational funds could be named for individuals the way sports arenas are named for corporations.

### *Analysis*

As an application of new technology in its very early stages, the institutional repository model as exemplified by Eprints has to be further developed to reach a stage sufficient to reliably and robustly support research and educational file sharing. Potential technical and financial support mechanisms to the voluntary model listed above are preliminary and immature. However, there are commendable features and potentials as a fair solution to the dissemination of academic, research and educational materials. Most stakeholders would benefit from adoption of this system. The most direct beneficiaries would be academic users. As outlined in Part 5.2 and 5.3.2.3<sup>205</sup>, the institutional repository system would, in all likelihood, provide users of research and educational materials with a platform facilitating access to academic information, specifically making it easier, cheaper and faster.

Academic authors would also benefit in two ways by the new system. First, their work can be disseminated to more readers in a shorter term without restriction by their employers.<sup>206</sup> The application of institutional repositories allows professional authors to decide whether, when and how to share their works, while reducing the chance of being restricted by employers. Second, academic authors may obtain non-monetary or indirect pecuniary compensation for sharing their works, enabling promotional enhancement, obtaining public funds, and improving their academic reputation.

As to the file sharing intermediary (in this case, the repository), they will be released from copyright liability, on the ground that all the works being shared on the institutional repositories are uploaded by the authors themselves, and that information-sharing through such networks is lawful. Therefore, these file sharing intermediaries are lawful.

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<sup>205</sup> See Part 5.2 and 5.3.2.3., at 186-198.

<sup>206</sup> See Part 5.4.3.4, at 213.

Finally, society at large would benefit in various ways from the shift to such a regime. The most obvious is that fair users in the context of traditional copyright are able to make use of research and educational materials freely and without doubt. As analysed in Chapter 4, both public and private models challenge the application of fair use doctrine in practice, given that they both require payment for access to knowledge, no matter whether the use is fair or not. In the proposed system, direct monetary payment for accessing academic information would largely disappear.

Though not perfect the voluntary model design has gathered valuable support from academic authors and institutions. For instance, the Harvard Faculty of Arts and Sciences voted in favour of a policy on February 12, 2008, under which “each faculty member agrees to grant to Harvard a non-exclusive license to make their scholarly articles freely available through the institution’s digital repository or otherwise so long as it is not done for profit”.<sup>207</sup> This pre-commitment

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<sup>207</sup> See, e.g., On Tuesday, February 12, 2008, the Harvard Faculty of Arts and Sciences came together as scholarly authors and collectively agreed that in the age of Internet they have a responsibility to manage their copyrights differently than they have been to date. Specifically, they unanimously voted in favour of a motion as stated as follows:

*“The Faculty of Arts and Sciences of Harvard University is committed to disseminating the fruits of its research and scholarship as widely as possible. In keeping with that commitment, the Faculty adopts the following policy: Each Faculty member grants to the President and Fellows of Harvard College permission to make available his or her scholarly articles and to exercise the copyright in those articles. In legal terms, the permission granted by each Faculty member is a nonexclusive, irrevocable, paid-up, worldwide license to exercise any and all rights under copyright relating to each of his or her scholarly articles, in any medium, and to authorize others to do the same, provided that the articles are not sold for a profit. The policy will apply to all scholarly articles written while the person is a member of the Faculty except for any articles completed before the adoption of this policy and any articles for which the Faculty member entered into an incompatible licensing or assignment agreement before the adoption of this policy. The Dean or the Dean’s designate will waive application of the policy for a particular article upon written request by a Faculty member explaining the need.*

*To assist the University in distributing the articles, each Faculty member will provide an electronic copy of the final version of the article at no charge to the appropriate representative of the Provost’s Office in an appropriate format (such as PDF) specified by the Provost’s Office. The Provost’s Office may make the article available to the public in an open-access repository.*

*The Office of the Dean will be responsible for interpreting this policy, resolving disputes concerning its interpretation and application, and recommending changes to the Faculty from time to time. The policy will be reviewed after three years and a report presented to the Faculty.”*

strategy licenses free use of academic materials prior to any copyright transfer to a journal publisher; it also waives the university's license on an article-by-article basis. According to Stevan Harnad, "this is big news because it is a bottom-up initiative driven by faculty authors".<sup>208</sup>

## 5.5 Conclusion: Summary of the Voluntary Model Design

Analysis of the comparison between public, private and voluntary models at *Figure 1* indicates that the voluntary model is the best trade off in the research and educational sphere between securing users "fair use" of research and educational materials; compensating academic authors, albeit through non-pecuniary benefits rather than monetary returns; and preventing file sharing intermediaries from being sued out of existence for contributing to copyright infringement by users.

However, difficulties have been identified with this model, including quality control and users' awareness/recognition issues. The academic file sharing community has adopted a variety of approaches when assessing the quality of academic works. The analysis at Part 5.4.3.4.<sup>209</sup> demonstrates that *the online journal with "conventional" peer-review system* may not be the best option to apply in digital file sharing for being expensive, slow and prone to bias. Moreover, the *open peer-review system* leaves content evaluation completely to individual users, raising concerns about the reliability and quality of the information. In addition, many might be surprised that *the dynamic peer-review system* as exemplified by the *U.S. Community Patent Review Project* works effectively in patent practice. However, academic peer-review, for being based on requirements for and dependence on professional knowledge in specific fields, is different and not translatable as a result.

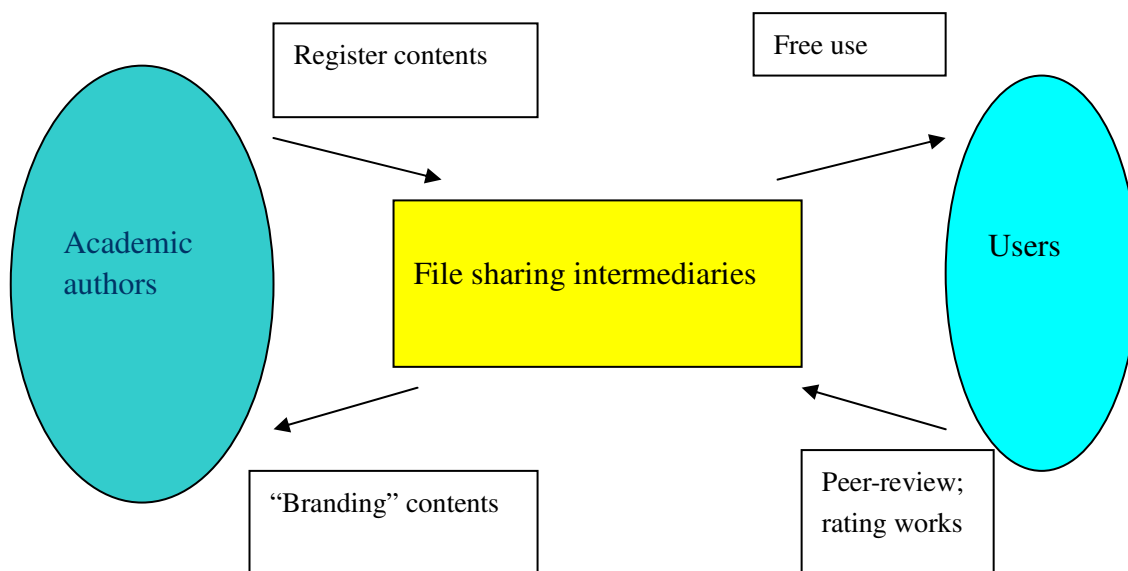
Given the evidence considered and reasoning set out, I propose a fundamental change in the quality control system, by replacing the traditional peer-review model with an institutional

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<sup>208</sup> Ibid.

<sup>209</sup> See Part 5.4.3.4, at 213..

repository quality control system. As demonstrated in Figure 5 below, an institutional repository “branding” model, similar to Eprints, would certify quality, especially in association with and incorporating the reputation of long-standing academic institutions, at source.



**Figure 5.** *The Voluntary Model Flow Chart*

As to users’ awareness, the “*open citation project*” is an example of a project to deliver citation information. It is a possible model to quantify the popularity of a work and thus generate an objective “research reputation” for the author. Based on the voluntary model design, a potential social research and educational material sharing system, which improves users’ fair access to materials and protects rightsholders’ interests, can be expected.

## Conclusion

The development of Internet technology, particularly digital file sharing, has provoked controversy and conflict about whether and how to protect certain lawful uses of the technology, such as file sharing in the context of research and education. Digital file sharing for purposes of research and education deserves particular protection as it encourages socially beneficial and culturally significant dissemination of knowledge.<sup>1</sup> Early chapters of this thesis examined the purpose of, and issues around, fair use/fair dealing doctrine which is the most important exception to copyright that research and educational users can rely on. This thesis also asserts that the fair use defence is not functioning adequately in the context of digital file sharing, and thereby failing to preserve a healthy Internet access to educational materials for students and scholars. If left unaddressed, this issue may lead to unbridled exclusive rights for rightsholders, resulting in detriment to exchange of knowledge.

A number of aspects of fair use in the context of file sharing have been challenged in recent legal practice. Firstly, the applicability of a fair use defence to “primary infringers”, i.e., end-users who upload, download and distribute copyright works through file sharing networks, has had to be re-assessed in the context of file sharing. As demonstrated in case studies on *UMG Recordings, Inc. v. MP3.Com*<sup>2</sup>, *Napster*,<sup>3</sup> and *Grokster*<sup>4</sup>, the connection between “some end-users”<sup>5</sup> whose conducts fall within copyright exceptions and the fair use doctrine has been negated, as end users rarely if ever have the opportunity to plead or prove fair use in court. Secondly, file sharing intermediaries, i.e., file sharing tool providers, have become anecdotally

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<sup>1</sup> Some scholars argue that sharing is the very core of social lives, such as in information, culture, education, computation, and communication sectors. See, e.g., Dan M. Kahan, “The Logic of Reciprocity: Trust, Collective Action, and Law”, *Law, Economics and Public Policy Research Paper*. No. 281 (2002). See also, Yochai Benkler, “Sharing Nicely: On Shareable Goods and the Emergence of Sharing as a Modality of Economic Production”, *Yale Law Journal*, Vol. 114 (2005) at 274-275. See also, Gunilla Wilden-Wulff, *Challenge of Knowledge Sharing in Practice: A Social Approach*, Oxford: Chandos Publishing Ltd. (2007).

<sup>2</sup> See, *UMG Recordings, Inc. v. MP3.Com*, 92 F. Supp. 2d 349, 351 (SDNY). [Hereinafter, *MP3.com*, in Brief]

<sup>3</sup> *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004 (9<sup>th</sup> Cir. 2001). [Hereinafter, *Napster*, in Brief]

<sup>4</sup> See, *MGM Inc v. Grokster Ltd* 259 F. Supp. 2d 1029 (C.D. Cal. April, 2003). *MGM Inc. v. Grokster Ltd* at Supreme Court (04-0480), 545 U.S., 125 s. Ct. 2764 (2005), See also, *Grokster*, certiorari to the United States Court of Appeals for the Ninth Circuit, No. 04-480. (June 27, 2005). [Hereinafter *Grokster*, in Brief].

<sup>5</sup> See *Grokster*, supra note 4, at 10.

and provably implicated in copyright infringing activities and thus are seen as undeserving of access to the fair use defence. Hence, if neither the end-user nor the file sharing intermediary can apparently benefit from the fair use doctrine in the context of file sharing, this suggests another mechanism needs to be found to reconcile the interest of rightsholders in gaining compensation for copies made of their works, with the right of research and educational users to access works for study and research. As things stand, can fair use doctrine avoid extinction when no one may practically take advantage of it?

This thesis examines a number of possible ways forward, which fall under the general heading of “fared” systems. One approach to reconciling file sharing with proper compensation for rightsholders is herein termed “the public model”. This involves the state or an agency such as a collecting agency in collecting money for rightsholders via a tax or levy. In the former German private copying levy system, for example,<sup>6</sup> the government imposed a levy on purchases of recordable media, in exchange for permission for users to make private non-commercial copies. Another example — “the private model” — collects compensation for rightsholders via private contracts<sup>7</sup>. However, given the specific characteristics of fair use doctrine, such a rightsholder-favouring solution will not work effectively to enable research and educational file sharing practice. In such schemes, every individual user of file sharing networks is charged for his use of the materials, no matter whether the use is “fair” or not. The question may be asked, if everyone has to pay for any use of copyright works, do we really have “fair” access to research and educational materials?

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<sup>6</sup> The first statutory levy scheme was introduced in Germany in 1965, and such scheme had been applied in Germany copyright law until January 1<sup>st</sup> 2008. See, *Gesetz betreffend das Urheberrecht und Werken der Literatur und der Tonkunst 1901 (LUG)*, Reichsgesetz (1. Januar 1902). Article 15 states,

“Eine Vervielfältigung ohne Einwilligung des Berechtigten ist unzulässig, gleichviel durch welches Verfahren sie bewirkt wird; auch begründet es keinen Unterschied, ob das Werk in einem oder in mehreren Exemplaren vervielfältigt wird.

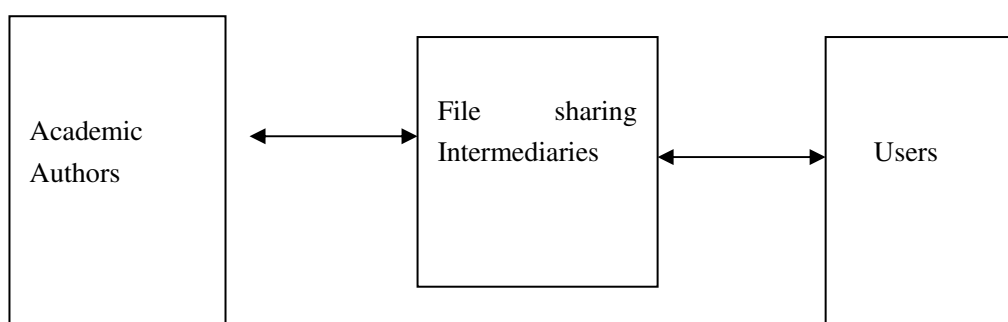
Eine Vervielfältigung zum persönlichen Gebrauch ist zulässig, wenn sie nicht den Zweck hat, aus dem Werke eine Einnahme zu erzielen”.

See also, Katerina Gaita and Andrew F. Christie. “Principle or Compromise? Understanding the Original Thinking Behind Statutory Licence and Levy Schemes for Private Copying”, *Intellectual Property Quarterly*, Vol. 4 (2004) at 442-447.

<sup>7</sup> See, e.g., the Apple’s iTunes business model was the first service with content from copyrightsholders to sell songs with no subscription fees, but iTunes relies upon the contract between Apple Company and the consumer effectively reallocating copyright entitlements.

Thus this thesis proposes that we replace the “fared” model with an “un-fared” strategy, i.e., a voluntary model. In brief, this refers to a system where authors release their copyright works voluntarily, merely in return for non-monetary or indirect monetary compensation. In comparison with the public and private fared use models, it can be predicted that the voluntary model truly provides and protects fair use rights in educational file sharing. The advantages include providing users with easier access to academic information, offering authors non-financial or indirect monetary compensation, releasing file sharing intermediaries from copyright liability, and encouraging academic publishers by increasing audience. Problems will remain however with recommending such a scheme to commercial publishers. It is possible that they have no obvious role in an educational and research file sharing world.

Finally therefore, this thesis critically evaluates the role of the commercial publisher in the research and educational world, and puts forward a design for a “voluntary model” which embraces authors, co-operating file sharing intermediaries, and users. As demonstrated in the graph below, this facilitates and encourages academic contents to be uploaded to file sharing networks without the need for intermediary commercial publishers. Users entitled to free access to the contents are required in return to connect their works to each paper they cite via a citation database programme.



In practice, however, research and educational file sharing is a more complex situation than is displayed in this simplified model. Users’ awareness and quality control issues need to be considered, in order to complete the voluntary model design. Through lessons learnt from



examination of the *Eprints* and *Open Citation project* this thesis presents a modified “voluntary model”, combining an institutional repository quality control system with a citation tracking rate scheme. These additions support the premise that this design is workable in practice.

The conclusion reached in this thesis therefore is that the voluntary model, in the particular context of research and education, is worthy of further research. It has the potential to successfully reconcile the struggle between the public interest in access to texts by students and researchers, and the interest of rightsholders to receive proper compensation for copies made, or non-pecuniary incentives to create educational works. This model is not intended to apply generally to the world of music, movie or entertainment file sharing where the balance of interests is very different. Nor is it intended to be presented as a perfect theory or model for such would surely be premature at this stage given the rapidity of advances in file sharing technology.

Overall, this work seeks to contribute to the theoretical understanding of the importance of applying fair use doctrine in the context of digital research and educational file sharing; and to contribute to a greater understanding of how new technologies as they emerge require a similar evolution of the norms of statute and case law which regulate connected areas.

## **Appendix 1: iTunes Store TERMS OF SERVICE**

THIS IS A LEGAL AGREEMENT BETWEEN YOU AND APPLE INC. ("APPLE") STATING THE TERMS THAT GOVERN YOUR USE OF THE ITUNES STORE SERVICE. THIS AGREEMENT - TOGETHER WITH ALL UPDATES, ADDITIONAL TERMS, SOFTWARE LICENSES, AND ALL OF APPLE'S RULES AND POLICIES - COLLECTIVELY CONSTITUTE THE "AGREEMENT" BETWEEN YOU AND APPLE. TO AGREE TO THESE TERMS, CLICK "AGREE." IF YOU DO NOT AGREE TO THESE TERMS, DO NOT CLICK "AGREE," AND DO NOT USE THE SERVICE. YOU MUST ACCEPT AND ABIDE BY THESE TERMS AS PRESENTED TO YOU: CHANGES, ADDITIONS, OR DELETIONS ARE NOT ACCEPTABLE, AND APPLE MAY REFUSE ACCESS TO THE ITUNES STORE FOR NONCOMPLIANCE WITH ANY PART OF THIS AGREEMENT.

1. Definition of the iTunes Store Service. Apple is the provider of the iTunes Store (the "Service") that permits you to purchase or rent (as applicable) digital content, such as sound recordings and videos (including movies and television shows), games, software, and ring tones, under certain terms and conditions as set forth in this Agreement.

2. Age requirements for use of the Service. This Service is available for individuals aged 13 years or older. If you are 13 or older but under the age of 18, you should review these terms and conditions with your parent or guardian to make sure that you and your parent or guardian understand these terms and conditions.

3. Objectionable Material. You understand that by using the Service, you may encounter content that may be deemed offensive, indecent, or objectionable, which content may or may not be identified as having explicit language. Nevertheless, you agree to use the Service at your sole risk and that Apple shall have no liability to you for content that may be found to be offensive, indecent, or objectionable. Content types (including genres, sub-genres and Podcast categories and sub-categories and the like) and descriptions are provided for convenience, and you acknowledge and agree that Apple does not guarantee their accuracy.

4. IMPORTANT SAFETY INFORMATION. (1) To avoid muscle, joint or eye strain during video game play, you should always take frequent breaks from playing, and stop and take a longer rest if your eyes, hands, wrists, or arms become tired or sore or you feel any other discomfort. (2) A very small percentage of people may experience seizures or blackouts when exposed to flashing lights or patterns, including while playing video games or

watching videos. Symptoms may include dizziness, nausea, involuntary movements, loss of awareness, altered vision, tingling, numbness, or other discomforts. Consult a doctor before playing video games if you have ever suffered these or other symptoms linked to seizures and/or epilepsy, and stop playing immediately and see a doctor if these or similar symptoms occur during game play. Parents should monitor their children's video game play for signs of symptoms.

5. System Requirements. Use of the Service requires one or more compatible devices, Internet access (fees may apply), and certain software (fees may apply), and may require obtaining updates or upgrades from time to time. Because use of the Service involves hardware, software, and Internet access, your ability to use the Service may be affected by the performance of these factors. High speed Internet access is strongly recommended (and is required for Movie Rentals). You acknowledge and agree that such system requirements, which may be changed from time to time, are your responsibility. The Service is not part of any other product or offering, and no purchase or rental (as applicable) or obtaining of any other product shall be construed to represent or guarantee you access to the Service.

6. Policies and Rules. Your use of the Service and transactions made through it are subject to Apple's Terms of Sale at <http://www.apple.com/legal/itunes/us/sales.html>, which can be readily viewed on the Service, and any end-user agreements or other terms and conditions required for use of the Service, all of which are hereby made a part of this Agreement. If you have not already read Apple's Terms of Sale, you should do so now. Your purchase of software products made through the Service is subject to any end-user agreements or other terms and conditions required for use of such products, all of which are hereby made a part of this Agreement.

## 7. Privacy

a. Apple's Privacy Policy. Except as otherwise expressly provided for in this Agreement, the Service is subject to Apple's Privacy Policy at <http://www.apple.com/legal/privacy/>, which is expressly made a part of this Agreement. If you have not already read Apple's Privacy Policy, you should do so now.

b. Genius. When you opt-in to the Genius feature, Apple will, from time to time, automatically collect information that can be used to identify media in your iTunes library on this computer, such as your play history and play lists. This includes media purchased

through iTunes and media obtained from other sources. This information will be stored anonymously and not associated with your name or iTunes account. When you use the Genius feature, Apple will use this information and the contents of your iTunes library, as well as other information, to give personalized recommendations to you.

Apple may only use this information and combine it with aggregated information from the iTunes libraries of other users who also opt-in to this feature, your iTunes Store purchase history data, aggregated purchase history data from other iTunes Store users, and other information obtained from third parties, to:

- Create personalized playlists for you from your iTunes library.
- Provide you with recommendations regarding media and other products and services that you may wish to purchase.
- Provide recommendations regarding products and services to other users.

At all times your information will be treated in accordance with Apple's Customer Privacy Policy which can be viewed at: [www.apple.com/legal/privacy/](http://www.apple.com/legal/privacy/).

Once you opt-in to the Genius feature, you will be able to create Genius playlists on Genius-capable devices. You must sync with your iTunes library after you have opted-in on iTunes to enable the Genius feature on a device.

If you would prefer we not collect and use information from your iTunes library in this manner, you should not enable the Genius feature. You can revoke your opt-in choice at any time by choosing to turn off the Genius feature from the Store menu. Upon opting-out, iTunes will no longer send information about your iTunes library to Apple. If you have elected to share your library from multiple computers, you need to turn off the Genius feature from each computer.

By opting-in to the Genius feature, you consent to the use of your information as described above and as described in the Apple Customer Privacy Policy.

8. Your Information. You agree to provide accurate, current, and complete information required to register with the Service and at other points as may be required in the course of using the Service ("Registration Data"). You further agree to maintain and update your Registration Data as required to keep it accurate, current, and complete. Apple may terminate your rights to any or all of the Service if any information you provide is false,

inaccurate or incomplete. You agree that Apple may store and use the Registration Data you provide (including credit card and PayPal account information) for use in maintaining your accounts and billing fees to your credit card or PayPal account.

#### 9. User Account and Security.

a. Account and Password. As a registered user of the Service, you may receive or establish an account ("Account"). You are solely responsible for maintaining the confidentiality and security of your Account. You should not reveal your Account information to anyone else or use anyone else's Account. You are entirely responsible for all activities that occur on or through your Account, and you agree to immediately notify Apple of any unauthorized use of your Account or any other breach of security. Apple shall not be responsible for any losses arising out of the unauthorized use of your Account.

b. Security. You understand that the Service, and products transacted through the Service, such as sound recordings, videos (including movies and television shows), games, software, ring tones, and related artwork ("Products"), include a security framework using technology that protects digital information and limits your usage of Products to certain usage rules established by Apple and its licensors ("Usage Rules"). You agree to comply with such Usage Rules, as further outlined below, and you agree not to violate or attempt to violate any security components. You agree not to attempt to, or assist another person to, circumvent, reverse-engineer, decompile, disassemble, or otherwise tamper with any of the security components related to such Usage Rules for any reason whatsoever. Usage Rules may be controlled and monitored by Apple for compliance purposes, and Apple reserves the right to enforce the Usage Rules with or without notice to you. You will not access the Service by any means other than through software that is provided by Apple for accessing the Service. You shall not access or attempt to access an Account that you are not authorized to access. You agree not to modify the software in any manner or form, or to use modified versions of the software, for any purposes including obtaining unauthorized access to the Service. Violations of system or network security may result in civil or criminal liability.

#### 10. Purchase or Rental of Apple Content

a. Products Requirements. You acknowledge that use of Products may require the use of other hardware and software products (e.g., the ability to make copies of Products on physical media and render performance of Products on authorized digital player devices), and that such hardware and software is your responsibility. Products may only be

downloaded once; after being downloaded, they cannot be replaced if lost for any reason. Once a Product is purchased or rented (as applicable) and you receive the Product, it is your responsibility not to lose, destroy, or damage the Product, and Apple shall be without liability to you in the event of any loss, destruction, or damage.

b. Use of Products. You acknowledge that Products (other than the iTunes Plus Products) contain security technology that limits your usage of Products to the following applicable Usage Rules, and, whether or not Products are limited by security technology, you agree to use Products in compliance with the applicable Usage Rules.

#### Usage Rules

(i) Your use of the Products is conditioned upon your prior acceptance of the terms of this Agreement.

(ii) You shall be authorized to use the Products only for personal, noncommercial use.

(iii) You shall be authorized to use the Products on five Apple-authorized devices at any time, except in the case of Movie Rentals, as described below.

(iv) You shall be able to store Products from up to five different Accounts on certain devices, such as an iPod or iPhone, and Apple TV at a time; provided that each iPhone may sync ring tone Products with only a single Apple-authorized device at a time, and that syncing an iPhone with another Apple-authorized device will cause any ring tone Products stored on such iPhone to be erased and, if you so choose, to be replaced with any ring tone Products stored on such other Apple-authorized device. Additional restrictions apply to Movies Rentals, as described below.

(v) You shall be authorized to burn an audio playlist up to seven times.

(vi) You shall not be entitled to burn video Products or ring tone Products.

(vii) You shall be entitled to export, burn (if applicable) or copy (if applicable) Products solely for personal, noncommercial use.

(viii) You may use only ring tone Products as a musical “ringer” in connection with phone calls.

(ix) Any burning (if applicable) or exporting capabilities are solely an accommodation to you and shall not constitute a grant or waiver (or other limitation or implication) of any

rights of the copyright owners in any audio or video content, sound recording, underlying musical composition, or artwork embodied in any Product.

(x) You agree that you will not attempt to, or encourage or assist any other person to, circumvent or modify any security technology or software that is part of the Service or used to administer the Usage Rules.

(xi) The delivery of Products does not transfer to you any commercial or promotional use rights in the Products.

(xii) iTunes Plus Products do not contain security technology that limits your usage of such Products, and Usage Rules (iii) – (vi) do not apply to iTunes Plus Products. You may copy, store and burn iTunes Plus Products as reasonably necessary for personal, noncommercial use.

(xiii) Usage rules for software Products are governed by the terms of any end-user agreements or other terms and conditions required for use of such Products.

(xiv) You shall be able to manually sync a Movie from at least one iTunes-authorized device to devices that have manual sync mode, provided that the Movie is associated with an Account on the primary iTunes-authorized device, where the primary iTunes-authorized device is the one that was first synced with the device, or the one that you subsequently designate as primary using iTunes.

(xv) Movie Rentals:

(aa) Movies are viewable only on your Mac or Windows computer (using iTunes 7.6 or later), iPhone, iPod touch, iPod nano (3rd or 4th generation), iPod classic, or on TVs using your Apple TV. Movies in high definition resolution (HD) are viewable only on TVs using your Apple TV and must be downloaded directly to your Apple TV. Movies are viewable only on one device at a time.

(bb) You must be connected to the Service when moving or streaming movies. Once a movie is moved, it is no longer viewable on the sending device. You may only move movies to another device from your Mac or Windows computer. Movies downloaded directly to your Apple TV may not be moved.

(cc) You have thirty (30) days after downloading a movie to begin viewing. Once you begin viewing, you have twenty-four (24) hours to view the movie (the “Viewing Period”). You

may view the movie an unlimited number of times during the Viewing Period. Movies are not viewable after the thirty (30) day period. Stopping, pausing or restarting a movie does not extend the available time for viewing.

(dd) If you move a movie to an iPod or iPhone and then use the Service to restore the iPod or iPhone before you finish watching it, the movie will be deleted and will not be recoverable. This also applies to choosing Settings > Reset > Erase all content and settings on iPod touch and iPhone. (ee) Broadband Internet connection required.

(xvi) HDMI. An HDCP connection is required in order to view movies (purchased or rented) and TV shows transmitted over HDMI.

c. You agree that your purchase or rental (as applicable) of Products constitutes your acceptance of and agreement to use such Products solely in accordance with the Usage Rules, and that any other use of the Products may constitute a copyright infringement. The security technology, if applicable, is an inseparable part of the Products. The Usage Rules shall govern your rights with respect to the Products, in addition to any other terms or rules that may have been established between you and another party. Apple reserves the right to modify the Usage Rules at any time.

d. You acknowledge that some aspects of the Service, Products, and administering of the Usage Rules entails the ongoing involvement of Apple. Accordingly, in the event that Apple changes any part of the Service or discontinues the Service, which Apple may do at its election, you acknowledge that you may no longer be able to use Products to the same extent as prior to such change or discontinuation, and that Apple shall have no liability to you in such case

e. The Service may offer interactive features that allow you to, among other things, submit or post information, materials or links to third party content on areas of the Service accessible and viewable by other users of the Service and the public. You represent and agree that any use by you of such features, including any information, materials or links submitted or posted by you, shall be your sole responsibility, shall not infringe or violate the rights of any other party or violate any laws, contribute to or encourage infringing or otherwise unlawful conduct, or otherwise be obscene, objectionable or in poor taste, and that you have obtained all necessary rights, licenses or clearances. You further agree to provide accurate and complete information in connection with your submission or posting of any information or materials on the Service. Moreover, you hereby grant Apple a worldwide,



royalty-free, non-exclusive license to use such materials as part of the Service, and in relation to Products, without any compensation or obligation to you.

Apple reserves the right not to post or publish any materials, and to delete, remove or edit any material, at any time in its sole discretion without notice or liability.

Apple has the right, but not the obligation, to monitor any information and materials submitted or posted by you or otherwise available on the Service, to investigate any reported or apparent violation of this Agreement, and to take any action that Apple in its sole discretion deems appropriate, including, without limitation, under Section 14 below or under our Copyright Policy (<http://www.apple.com/legal/trademark/claimsofcopyright.html>).

11. Territory. The Service is available to you only in the United States. You agree not to use or attempt to use the Service from outside of the available territory, and that Apple may use technologies to verify your compliance.

12. Agreement to Pay.

a. Payment for Products. You agree to pay for all Products you purchase or rent (as applicable) through the Service, and that Apple may charge your credit card or PayPal account for any Products purchased or rented (as applicable), and for any additional amounts (including any taxes and late fees, as applicable) as may be accrued by or in connection with your Account. **YOU ARE RESPONSIBLE FOR THE TIMELY PAYMENT OF ALL FEES AND FOR PROVIDING APPLE WITH A VALID CREDIT CARD OR PAYPAL ACCOUNT DETAILS FOR PAYMENT OF ALL FEES.** All fees will be billed to the credit card, or the PayPal account, you designate during the registration process. If you want to designate a different credit card or if there is a change in your credit card or PayPal account status, you must change your credit card or PayPal account information online at the Account Info section of the Service. (There may be a temporary disruption of your access to the Service until Apple can verify the validity of the new credit card or PayPal account information.)

b. Right to Change Prices and Availability of Products. Prices and availability of any Products are subject to change at any time.

c. Electronic Signatures and Contracts. Your use of the Service includes the ability to enter into agreements and/or to make transactions electronically. **YOU ACKNOWLEDGE THAT YOUR ELECTRONIC SUBMISSIONS CONSTITUTE YOUR AGREEMENT AND**

INTENT TO BE BOUND BY AND TO PAY FOR SUCH AGREEMENTS AND TRANSACTIONS. YOUR AGREEMENT AND INTENT TO BE BOUND BY ELECTRONIC SUBMISSIONS APPLIES TO ALL RECORDS RELATING TO ALL TRANSACTIONS YOU ENTER INTO ON THIS SITE, INCLUDING NOTICES OF CANCELLATION, POLICIES, CONTRACTS, AND APPLICATIONS.

d. In order to access and retain your electronic records, you may be required to have certain hardware and software, which are your sole responsibility.

### 13. Delivery of Products.

a. Interrupted Delivery to iPod or iPhone. If delivery of a Product you purchased or rented (as applicable) using Wi-Fi on an iPod or iPhone is interrupted, your transaction will be included in your download queue. You may resume the delivery to your Apple-authorized device by selecting "Check for Purchases" from the Store menu in the iTunes application.

b. Technical Problems. On occasion, technical problems may delay or prevent delivery of your Product. Your exclusive and sole remedy with respect to Product that is not delivered within a reasonable period will be either replacement of such Product, or refund of the price paid for such Product, as determined by Apple.

### 14. Intellectual Property.

a. Acknowledgement of Ownership. You agree that the Service, including but not limited to Products, graphics, audio clips, video clips, and editorial content, contains proprietary information and material that is owned by Apple and/or its licensors, and is protected by applicable intellectual property and other laws, including but not limited to copyright, and that you will not use such proprietary information or materials in any way whatsoever except for use of the Service in compliance with the terms of this Agreement. No portion of the Service may be reproduced in any form or by any means, except as expressly permitted hereunder. You agree not to modify, rent, lease, loan, sell, distribute, or create derivative works based on the Service, in any manner, and you shall not exploit the Service in any unauthorized way whatsoever, including but not limited to, by trespass or burdening network capacity.

b. Removal of Apple Content or Other Materials. Notwithstanding any other provision of this Agreement, Apple and its licensors reserve the right to change, suspend, remove, or disable access to any Products, content, or other materials comprising a part of the Service

at any time without notice. In no event will Apple be liable for the removal of or disabling of access to any such Products, content or materials under this Agreement. Apple may also impose limits on the use of or access to certain features or portions of the Service, in any case and without notice or liability.

c. Copyrights. All copyrights in and to the Service, including but not limited to, the iTunes Store (including the compilation of content, postings, links to other Internet resources, and descriptions of those resources), and software, are owned by Apple and/or its licensors, who reserve all their rights in law and equity. THE USE OF THE SOFTWARE OR ANY PART OF THE SERVICE, EXCEPT FOR USE OF THE SERVICE AS PERMITTED IN THESE TERMS OF SERVICE, IS STRICTLY PROHIBITED AND INFRINGES ON THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS AND MAY SUBJECT YOU TO CIVIL AND CRIMINAL PENALTIES, INCLUDING POSSIBLE MONETARY DAMAGES, FOR COPYRIGHT INFRINGEMENT.

d. Trademarks. Apple, the Apple logo, iTunes, and other Apple trademarks, service marks, graphics, and logos used in connection with the Service are trademarks or registered trademarks of Apple Inc. in the U.S. and/or other countries. Other trademarks, service marks, graphics, and logos used in connection with the Service may be the trademarks of their respective owners. You are granted no right or license with respect to any of the aforesaid trademarks and any use of such trademarks.

e. Album Cover Art. As an account holder of the Service in good standing, Apple may provide you with limited access to download certain album cover art for music stored in the iTunes Library of your iTunes application, subject to availability. Such access is provided as an accommodation only, and Apple does not warrant or endorse and does not assume and will not have any liability or responsibility for such album cover art or your use thereof. You may only access album cover art (to the extent available) for music for which you are the lawful owner of a legal copy. Album cover art is provided for personal, noncommercial use only. You agree that you will not use album cover art in any manner that would infringe or violate these Terms of Service or the rights of any other party, and that Apple is not in any way responsible for any such use by you.

## 15. Termination.

a. Termination by Apple. If you fail, or Apple suspects that you have failed, to comply with any of the provisions of this Agreement, including but not limited to failure to make payment of fees due, failure to provide Apple with a valid credit card or with accurate and

complete Registration Data, failure to safeguard your Account information, violation of the Usage Rules or any license to the software, or infringement or other violation of third parties' rights, Apple, at its sole discretion, without notice to you may: (i) terminate this Agreement and/or your Account, and you will remain liable for all amounts due under your Account up to and including the date of termination; and/or (ii) terminate the license to the software; and/or (iii) preclude access to the Service (or any part thereof).

b. Termination of the Service. Apple reserves the right to modify, suspend, or discontinue the Service (or any part or content thereof) at any time with or without notice to you, and Apple will not be liable to you or to any third party should it exercise such rights.

16. General Compliance with Laws. The Service is controlled and operated by Apple from its offices in the United States. You agree to comply with all local, state, federal, and national laws, statutes, ordinances, and regulations that apply to your use of the Service.

17. Enforcement of These Terms. Apple reserves the right to take steps Apple believes are reasonably necessary or appropriate to enforce and/or verify compliance with any part of this Agreement (including but not limited to Apple's right to cooperate with any legal process relating to your use of the Service and/or Products, and/or a third party claim that your use of the Service and/or Products is unlawful and/or infringes such third party's rights). You agree that Apple has the right, without liability to you, to disclose any Registration Data and/or Account information to law enforcement authorities, government officials, and/or a third party, as Apple believes is reasonably necessary or appropriate to enforce and/or verify compliance with any part of this Agreement (including but not limited to Apple's right to cooperate with any legal process relating to your use of the Service and/or Products, and/or a third party claim that your use of the Service and/or Products is unlawful and/or infringes such third party's rights).

18. No Responsibility for Third-Party Materials or Web sites. Certain content, Products, and services available via the Service may include materials from third parties. In addition, Apple may provide links to certain third-party Web sites. You acknowledge and agree that Apple is not responsible for examining or evaluating the content or accuracy of any such third-party material or Web sites. Apple does not warrant or endorse and does not assume and will not have any liability or responsibility for any third-party materials or Web sites, or for any other materials, products, or services of third parties. Links to other Web sites are provided solely as a convenience to you. You agree that you will not use any third-party materials in a manner that would infringe or violate the rights of any other party, and that Apple is not in any way responsible for any such use by you.

19. Disclaimer of Warranties; Liability Limitations.

a. APPLE DOES NOT GUARANTEE, REPRESENT, OR WARRANT THAT YOUR USE OF THE SERVICE WILL BE UNINTERRUPTED OR ERROR-FREE, AND YOU AGREE THAT FROM TIME TO TIME APPLE MAY REMOVE THE SERVICE FOR INDEFINITE PERIODS OF TIME, OR CANCEL THE SERVICE AT ANY TIME, WITHOUT NOTICE TO YOU.

b. YOU EXPRESSLY AGREE THAT YOUR USE OF, OR INABILITY TO USE, THE SERVICE IS AT YOUR SOLE RISK. THE SERVICE AND ALL PRODUCTS AND SERVICES DELIVERED TO YOU THROUGH THE SERVICE ARE (EXCEPT AS EXPRESSLY STATED BY APPLE) PROVIDED "AS IS" AND "AS AVAILABLE" FOR YOUR USE, WITHOUT WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, AND NONINFRINGEMENT. BECAUSE SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, THE ABOVE EXCLUSION OF IMPLIED WARRANTIES MAY NOT APPLY TO YOU.

c. IN NO CASE SHALL APPLE, ITS DIRECTORS, OFFICERS, EMPLOYEES, AFFILIATES, AGENTS, CONTRACTORS, OR LICENSORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, PUNITIVE, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM YOUR USE OF ANY OF THE SERVICES OR FOR ANY OTHER CLAIM RELATED IN ANY WAY TO YOUR USE OF THE SERVICES, INCLUDING, BUT NOT LIMITED TO, ANY ERRORS OR OMISSIONS IN ANY CONTENT, OR ANY LOSS OR DAMAGE OF ANY KIND INCURRED AS A RESULT OF THE USE OF ANY CONTENT (OR PRODUCT) POSTED, TRANSMITTED, OR OTHERWISE MADE AVAILABLE VIA THE SERVICE, EVEN IF ADVISED OF THEIR POSSIBILITY. BECAUSE SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR THE LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, IN SUCH STATES OR JURISDICTIONS, APPLE'S LIABILITY SHALL BE LIMITED TO THE EXTENT PERMITTED BY LAW.

d. APPLE SHALL USE REASONABLE EFFORTS TO PROTECT INFORMATION SUBMITTED BY YOU IN CONNECTION WITH THE SERVICES, BUT YOU ACKNOWLEDGE AND AGREE THAT YOUR SUBMISSION OF SUCH INFORMATION IS AT YOUR SOLE RISK, AND APPLE HEREBY DISCLAIMS ANY

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20. Waiver and Indemnity. BY USING THE SERVICE, YOU AGREE TO INDEMNIFY AND HOLD APPLE, ITS DIRECTORS, OFFICERS, EMPLOYEES, AFFILIATES, AGENTS, CONTRACTORS, AND LICENSORS HARMLESS WITH RESPECT TO ANY CLAIMS ARISING OUT OF YOUR BREACH OF THIS AGREEMENT, YOUR USE OF THE SERVICE, OR ANY ACTION TAKEN BY APPLE AS PART OF ITS INVESTIGATION OF A SUSPECTED VIOLATION OF THIS AGREEMENT OR AS A RESULT OF ITS FINDING OR DECISION THAT A VIOLATION OF THIS AGREEMENT HAS OCCURRED. THIS MEANS THAT YOU CANNOT SUE OR RECOVER ANY DAMAGES FROM APPLE, ITS DIRECTORS, OFFICERS, EMPLOYEES, AFFILIATES, AGENTS, CONTRACTORS, AND LICENSORS AS A RESULT OF ITS DECISION TO REMOVE OR REFUSE TO PROCESS ANY INFORMATION OR CONTENT, TO WARN YOU, TO SUSPEND OR TERMINATE YOUR ACCESS TO THE SERVICE, OR TO TAKE ANY OTHER ACTION DURING THE INVESTIGATION OF A SUSPECTED VIOLATION OR AS A RESULT OF APPLE'S CONCLUSION THAT A VIOLATION OF THIS AGREEMENT HAS OCCURRED. THIS WAIVER AND INDEMNITY PROVISION APPLIES TO ALL VIOLATIONS DESCRIBED IN OR CONTEMPLATED BY THIS AGREEMENT.

21. Changes. Apple reserves the right, at any time and from time to time, to update, revise, supplement, and otherwise modify this Agreement and to impose new or additional rules, policies, terms, or conditions on your use of the Service. Such updates, revisions, supplements, modifications, and additional rules, policies, terms, and conditions (collectively referred to in this Agreement as "Additional Terms") will be effective immediately and incorporated into this Agreement. Your continued use of the iTunes Store

following will be deemed to constitute your acceptance of any and all such Additional Terms. All Additional Terms are hereby incorporated into this Agreement by this reference.

22. Notices. Apple may send you notice with respect to the Service by sending an email message to the email address listed in your Apple Account contact information, by sending a letter via postal mail to the contact address listed in your Apple Account contact information, or by a posting on the iTunes Store. Notices shall become effective immediately.

23. Governing Law. The laws of the State of California, excluding its conflicts of law rules, govern these Terms of Service and your use of the Service. Your use of the Service may also be subject to other local, state, national, or international laws. You expressly agree that exclusive jurisdiction for any claim or dispute with Apple or relating in any way to your use of the Service resides in the courts of the State of California.

24. Miscellaneous. These Terms of Service constitute the entire agreement between you and Apple and govern your use of the Service, superseding any prior agreements between you and Apple. You also may be subject to additional terms and conditions that may apply when you use affiliate services, third-party content, or third-party software. If any part of these Terms of Service is held invalid or unenforceable, that portion shall be construed in a manner consistent with applicable law to reflect, as nearly as possible, the original intentions of the parties, and the remaining portions shall remain in full force and effect. Apple's failure to enforce any right or provisions in these Terms of Service will not constitute a waiver of such provision, or any other provision of these Terms of Service. If any provision of this Agreement is found by a court of competent jurisdiction to be invalid, the other provisions will remain in full force and effect. Apple will not be responsible for failures to fulfill any obligations due to causes beyond its control.

Last updated: September 4, 2008

## **Appedix 2: Apple Store TERMS AND CONDITIONS**

THIS IS A LEGAL AGREEMENT BETWEEN YOU AND APPLE INC. ("APPLE") STATING THE TERMS THAT GOVERN YOUR USE OF THE APP STORE SERVICE. THIS AGREEMENT - TOGETHER WITH ALL UPDATES, ADDITIONAL TERMS, SOFTWARE LICENSES, AND ALL OF APPLE'S RULES AND POLICIES - COLLECTIVELY CONSTITUTE THE "AGREEMENT" BETWEEN YOU AND APPLE. TO AGREE TO THESE TERMS, CLICK "AGREE." IF YOU DO NOT AGREE TO THESE TERMS, DO NOT CLICK "AGREE," AND DO NOT USE THE SERVICE. YOU MUST ACCEPT AND ABIDE BY THESE TERMS AS PRESENTED TO YOU: CHANGES, ADDITIONS, OR DELETIONS ARE NOT ACCEPTABLE, AND APPLE MAY REFUSE ACCESS TO THE APP STORE FOR NONCOMPLIANCE WITH ANY PART OF THIS AGREEMENT.

1. DEFINITION OF THE APP STORE SERVICE. Apple is the provider of the App Store (the "Service") that permits you to license software products, such as games and applications, under certain terms and conditions as set forth in this Agreement.

2. AGE REQUIREMENTS FOR USE OF THE SERVICE. This Service is available for individuals aged 13 years or older. If you are 13 or older but under the age of 18, you should review these terms and conditions with your parent or guardian to make sure that you and your parent or guardian understand these terms and conditions.

3. U.S. ONLY. The Service is available to you only in the United States and is not available in any other location. You agree not to use or attempt to use the Service from outside of the available territory. Apple may use technologies to verify such compliance.

4. LICENSE OF PRODUCTS. The software products made available through the Service (the "Products") are licensed, not sold, to you. There are two (2) categories of Products offered through the Service, as follows: (i) those Products that have been developed, and are licensed to you, by Apple (the "Apple Products"); and (ii) those Products that have been developed, and are licensed to you, by a third party developer (the "Third Party Products"). The category of any particular Product (i.e., Apple Product or Third Party Product, as the case may be) is identified on the Service application.

Your license to each Product that you obtain through the Service is subject to the Licensed Application End User License Agreement set forth below, and you agree that the terms of the Licensed Application End User License Agreement will apply to each Apple Product



and to each Third Party Product that you license through the Service, unless the Product is covered by a valid end user license agreement entered into between you and the licensor of the Product (the “Licensor”), in which case the Licensor’s end user license agreement will apply to that Product. The Licensor reserves all rights in and to the Product not expressly granted to you.

You acknowledge that the license you purchase to each Apple Product that you obtain through the Service is a binding agreement between you and Apple, and that the license you purchase to each Third Party Product is a binding agreement between you and the third party licensor of that Third Party Product (“the Application Provider”) only. The Application Provider of each Third Party Product is solely responsible for that Third Party Product, the content therein, any warranties to the extent that such warranties have not been disclaimed, and any claims that you or any other party may have relating to that Third Party Product or your use of that Third Party Product. You acknowledge that you are purchasing the license to each Third Party Product from the Application Provider of that Third Party Product; Apple is acting as agent for the Application Provider in providing each such Third Party Product to you; Apple is not a party to the license between you and the Application Provider with respect to that Third Party Product; and Apple is not responsible for that Third Party Product, the content therein, or any warranties or claims that you or any other party may have relating to that Third Party Product or your use of that Third Party Product.

You acknowledge and agree that Apple, and Apple’s subsidiaries, are third party beneficiaries of the Licensed Application End User License Agreement, or the Application Provider’s end user license agreement, as the case may be, for each Third Party Product, and that, upon your acceptance of the terms and conditions of the license to any such Third Party Product, Apple will have the right (and will be deemed to have accepted the right) to enforce such license against you as a third party beneficiary thereof.

All Products made available through the Service are licensed to end user customers only.

**5. SYSTEM REQUIREMENTS.** Your use of the Service and transactions made through it are subject to any end-user agreements or other terms and conditions required for use of the software required for use of the Service, all of which are hereby made a part of this Agreement.

Use of the Service requires one or more compatible devices, Internet access (fees may apply), and certain software (fees may apply), and may require obtaining updates or upgrades from time to time. Because use of the Service involves hardware, software, and

Internet access, your ability to use the Service may be affected by the performance of these factors. High speed Internet access is strongly recommended. You acknowledge and agree that such system requirements, which may be changed from time to time, are your responsibility. The Service is not part of any other product or offering, and no purchase or obtaining of any other product shall be construed to represent or guarantee you access to the Service.

## 6. PRIVACY

a. APPLE'S PRIVACY POLICY. Except as otherwise expressly provided for in this Agreement, the Service is subject to Apple's Privacy Policy at <http://www.apple.com/legal/privacy/>, which is expressly made a part of this Agreement. If you have not already read Apple's Privacy Policy, you should do so now.

b. GENIUS. When you opt-in to the Genius feature, Apple will, from time to time, automatically collect information that can be used to identify media in your iTunes library on this computer, such as your play history and play lists. This includes media purchased through iTunes and media obtained from other sources. This information will be stored anonymously and not associated with your name or iTunes account. When you use the Genius feature, Apple will use this information and the contents of your iTunes library, as well as other information, to give personalized recommendations to you.

Apple may only use this information and combine it with aggregated information from the iTunes libraries of other users who also opt-in to this feature, your iTunes Store purchase history data, aggregated purchase history data from other iTunes Store users, and other information obtained from third parties, to:

- Create personalized playlists for you from your iTunes library.
- Provide you with recommendations regarding media and other products and services that you may wish to purchase.
- Provide recommendations regarding products and services to other users.

At all times your information will be treated in accordance with Apple's Customer Privacy Policy which can be viewed at: [www.apple.com/legal/privacy/](http://www.apple.com/legal/privacy/).

Once you opt-in to the Genius feature, you will be able to create Genius playlists on Genius-capable devices. You must sync with your iTunes library after you have opted-in on iTunes to enable the Genius feature on a device.

If you would prefer we not collect and use information from your iTunes library in this manner, you should not enable the Genius feature. You can revoke your opt-in choice at any time by choosing to turn off the Genius feature from the Store menu. Upon opting-out, iTunes will no longer send information about your iTunes library to Apple. If you have elected to share your library from multiple computers, you need to turn off the Genius feature from each computer.

By opting-in to the Genius feature, you consent to the use of your information as described above and as described in the Apple Customer Privacy Policy.

7. YOUR INFORMATION. You agree to provide accurate, current, and complete information required to register with the Service and at other points as may be required in the course of using the Service ("Registration Data"). You further agree to maintain and update your Registration Data as required to keep it accurate, current, and complete. Apple may terminate your rights to any or all of the Service if any information you provide is false, inaccurate or incomplete. You agree that Apple may store and use the Registration Data you provide (including credit card and PayPal account information) for use in maintaining your accounts and billing fees to your credit card or PayPal account.

#### 8. USER ACCOUNT AND SECURITY.

a. Account and Password. As a registered user of the Service, you may receive or establish an account ("Account"). You are solely responsible for maintaining the confidentiality and security of your Account. You should not reveal your Account information to anyone else or use anyone else's Account. You are entirely responsible for all activities that occur on or through your Account, and you agree to immediately notify Apple of any unauthorized use of your Account or any other breach of security. Apple shall not be responsible for any losses arising out of the unauthorized use of your Account.

b. Security. You understand that the Service, and products transacted through the Service, include a security framework using technology that protects digital information and limits your usage of Products to certain usage rules established by Apple and its principals ("Usage Rules"). You agree to comply with such Usage Rules, as further outlined below, and you agree not to violate or attempt to violate any security components. You agree not to

attempt to, or assist another person to, circumvent, reverse-engineer, decompile, disassemble, or otherwise tamper with any of the security components related to such Usage Rules for any reason whatsoever. Usage Rules may be controlled and monitored by Apple for compliance purposes, and Apple reserves the right to enforce the Usage Rules with or without notice to you. You will not access the Service by any means other than through software that is provided by Apple for accessing the Service. You shall not access or attempt to access an Account that you are not authorized to access. You agree not to modify the software in any manner or form, or to use modified versions of the software, for any purposes including obtaining unauthorized access to the Service. Violations of system or network security may result in civil or criminal liability.

## 9. USE OF PRODUCTS AND THE SERVICE

a. **Products Requirements.** You acknowledge that use of Products may require the use of other hardware and software products (e.g., the ability to make copies of Products on physical media and render performance of Products on authorized devices), and that such hardware and software is your responsibility. Products may only be downloaded once; after being downloaded, they cannot be replaced if lost for any reason. Once a Product is licensed and you receive the Product, it is your responsibility not to lose, destroy, or damage the Product, and Apple shall be without liability to you in the event of any loss, destruction, or damage.

b. **Use of Products.** You acknowledge that Products contain security technology that limits your usage of Products to the following applicable Usage Rules, and, whether or not Products are limited by security technology, you agree to use Products in compliance with the applicable Usage Rules.

### Usage Rules

(i) Your use of the Products is conditioned upon your prior acceptance of the terms of this Agreement and the applicable end-user license agreement.

(ii) You shall be able to store Products from up to five different Accounts on certain devices, including an iPod touch or iPhone, at a time.

(iii) You shall be able to store Products on five iTunes-authorized devices at any time.

(iv) You agree that you will not attempt to, or encourage or assist any other person to, circumvent or modify any security technology or software that is part of the Service or used to administer the Usage Rules.

(v) The delivery of Products does not transfer to you any promotional use rights in the Products.

(vi) You shall be able to manually sync Products from at least one iTunes-authorized device to devices that have manual sync mode, provided that the Product is associated with an Account on the primary iTunes-authorized device, where the primary iTunes-authorized device is the one that was first synced with the device, or the one that you subsequently designate as primary using iTunes.

c. You agree that your license of Products constitutes your acceptance of and agreement to use such Products solely in accordance with the Usage Rules, and that any other use of the Products may constitute a copyright infringement. The security technology, if applicable, is an inseparable part of the Products. The Usage Rules shall govern your rights with respect to the Products, in addition to any other terms or rules that may have been established between you and another party. Apple reserves the right to modify the Usage Rules at any time.

d. You acknowledge that some aspects of the Service, Products, and administering of the Usage Rules entails the ongoing involvement of Apple. Accordingly, in the event that Apple changes any part of the Service or discontinues the Service, which Apple may do at its election, you acknowledge that you may no longer be able to use Products to the same extent as prior to such change or discontinuation, and that Apple shall have no liability to you in such case.

e. The Service may offer interactive features that allow you to, among other things, submit or post information, materials or links to third party content on areas of the Service accessible and viewable by other users of the Service and the public. You represent and agree that any use by you of such features, including any information, materials or links submitted or posted by you, shall be your sole responsibility, shall not infringe or violate the rights of any other party or violate any laws, contribute to or encourage infringing or otherwise unlawful conduct, or otherwise be obscene, objectionable or in poor taste, and that you have obtained all necessary rights, licenses or clearances. You further agree to provide accurate and complete information in connection with your submission or posting of any information or materials on the Service. Moreover, you hereby grant Apple a worldwide,

royalty-free, non-exclusive license to use such materials as part of the Service, and in relation to Products, without any compensation or obligation to you.

Apple reserves the right not to post or publish any materials, and to delete, remove or edit any material, at any time in its sole discretion without notice or liability.

Apple has the right, but not the obligation, to monitor any information and materials submitted or posted by you or otherwise available on the Service, to investigate any reported or apparent violation of this Agreement, and to take any action that Apple in its sole discretion deems appropriate, including, without limitation, under Section 23 below or under our Copyright Policy (<http://www.apple.com/legal/trademark/claimsofcopyright.html>).

10. PAYMENT METHODS. The Service accepts credit cards, payment through your PayPal account, and iTunes Cards, iTunes Store Gift Certificates, Content Codes, and Allowance Account balances as forms of payment. If a credit card company, or your PayPal account, is being used for a transaction, Apple may obtain a pre-approval from the credit card company or from PayPal (as the case may be) for an amount up to the amount of the order. Billing to your credit card or to your PayPal account occurs at the time of purchase or shortly thereafter. If the balance from an iTunes Card, iTunes Store Gift Certificate or Allowance Account is used for an App Store transaction, the amount is deducted from your Account or your iTunes Card (as the case may be) at the time of purchase. If the total amount of the transaction is greater than the balance available in your iTunes Card, Gift Certificate or Allowance Account, your credit card, or PayPal account, will be charged for the balance.

The Service accepts the following credit cards: Visa, MasterCard, American Express, and Discover.

#### PLEASE NOTE

We are unable to accept credit cards issued by banks outside of the United States or prepaid gift cards issued by credit card companies. Debit cards and check cards have daily spending limits that may prevent the processing of your order.

If a transaction has been declined online due to credit card issues, or issues with your PayPal account, please ensure all data is correct and resubmit. If the transaction is not accepted online, you will be unable to use that card or your PayPal account (as the case may be) for your transaction and should use another credit card.

## 11. AGREEMENT TO PAY.

a. **Payment for Products.** You agree to pay for all Products you license through the Service, and that Apple may charge your credit card or PayPal account for any Products licensed, and for any additional amounts (including any taxes and late fees, as applicable) as may be accrued by or in connection with your Account. **YOU ARE RESPONSIBLE FOR THE TIMELY PAYMENT OF ALL FEES AND FOR PROVIDING APPLE WITH VALID CREDIT CARD OR PAYPAL ACCOUNT DETAILS FOR PAYMENT OF ALL FEES.** All fees will be billed to the credit card, or the PayPal account, you designate during the registration process. If you want to designate a different credit card or if there is a change in your credit card or PayPal account status, you must change your credit card or PayPal account information online at the Account Info section of the Service. (There may be a temporary disruption of your access to the Service until Apple can verify the validity of the new credit card or PayPal account information.)

b. **Right to Change Prices and Availability of Products.** Prices and availability of any Products are subject to change at any time.

c. **Electronic Signatures and Contracts.** Your use of the Service includes the ability to enter into agreements and/or to make transactions electronically. **YOU ACKNOWLEDGE THAT YOUR ELECTRONIC SUBMISSIONS CONSTITUTE YOUR AGREEMENT AND INTENT TO BE BOUND BY AND TO PAY FOR SUCH AGREEMENTS AND TRANSACTIONS. YOUR AGREEMENT AND INTENT TO BE BOUND BY ELECTRONIC SUBMISSIONS APPLIES TO ALL RECORDS RELATING TO ALL TRANSACTIONS YOU ENTER INTO ON THIS SITE, INCLUDING NOTICES OF CANCELLATION, POLICIES, CONTRACTS, AND APPLICATIONS.**

d. In order to access and retain your electronic records, you may be required to have certain hardware and software, which are your sole responsibility.

## 12. DELIVERY OF PRODUCTS; REFUNDS.

a. **Interrupted Delivery to iPod or iPhone.** If delivery of a Product you licensed on an iPod or iPhone is interrupted, your transaction will be included in your download queue. You may resume the delivery to your Apple-authorized device by selecting "Check for Purchases" from the Store menu in the iTunes or App Store application.

b. Refund Policy. On occasion, technical problems may delay or prevent delivery of your Product. Your exclusive and sole remedy with respect to Product that is not delivered within a reasonable period will be either replacement of such Product, or refund of the price paid for such Product, as determined by Apple. Otherwise, no refunds are available.

13. 1-CLICK®. 1-Click is a registered service mark of Amazon.com, Inc., used under license. All App Store transactions use 1-Click, a convenient feature that allows you to license Products from the Service with a single click of your mouse or other input device. When accessing the Service on your iPod or iPhone, 1-Click is activated for each transaction by pressing the button showing the price of the product, which reveals the "Install" or "Buy" button. When accessing the Service on your computer, clicking the "Buy" or "Get" button will start the download immediately and complete your transaction without any further steps. Transactions using 1-Click are subject to these Terms and Conditions, including the Refund Policy set forth herein.

14. BILLING. If you are transacting using 1-Click or your PayPal account, your order may be authorized and billed in gradual increments during one transaction session as you click the "Buy" button. Depending on the size of your order, this may appear as multiple orders and billings on your credit card statement.

15. SALES TAX. Service transactions will include sales tax based on the bill-to address and the sales tax rate in effect at the time your transaction is completed. If the sales tax rate for the billing address changes before the licensed Product is downloaded, the new tax rate in effect at the time of download will apply. We will only charge tax in states where such transactions are taxable. No customers are eligible for tax exemptions for transactions made on the Service.

16. iTUNES CARDS. iTunes Cards are for transactions on the iTunes Store and the App Store only. iTunes Cards may not be used for transactions on the Apple Online Store or in Apple Retail Stores. iTunes Cards are non-refundable. iTunes Cards may not be used to purchase Gift Certificates, Allowance Accounts, gifts, or other iTunes Cards.

17. UPGRADES. The latest version of the iTunes software is recommended to access the Service. From time to time, an upgrade to the latest version of the iTunes software may be required in order to make transactions from the Service, to download Products previously licensed from the Service (for example, Products in your download queue) or to take advantage of new features of the Service. The latest version of the iTunes software is available for download at no charge, and the minimum system requirements for running it



are provided, at <http://www.apple.com/itunes/download/>. Use of iTunes software is subject to acceptance of its software license agreement presented at the time of installation. For any additional questions regarding required upgrades, please contact iTunes Store Customer Service (see below).

18. **PRODUCT AVAILABILITY.** On occasion, a licensed Product may become unavailable following a transaction but prior to download. Your sole remedy in such cases is a refund of the price paid for the unavailable licensed Product. Please contact iTunes Store Customer Service for assistance in such cases (see below).

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20. **IMPORTANT SAFETY INFORMATION:** (1) To avoid muscle, joint or eye strain during video game play, you should always take frequent breaks from playing, and stop and take a longer rest if your eyes, hands, wrists or arms become tired or sore or you feel any other discomfort. (2) A very small percentage of people may experience seizures or blackouts when exposed to flashing lights or patterns, including while playing video games or watching videos. Symptoms may include dizziness, nausea, involuntary movements, loss of awareness, altered vision, tingling, numbness, or other discomforts. Consult a doctor before playing video games if you have ever suffered these or other symptoms linked to seizures and/or epilepsy, and stop playing immediately and see a doctor if these or similar symptoms occur during game play. Parents should monitor their children's video game play for signs of symptoms.

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