

American University in Cairo

AUC Knowledge Fountain

Theses and Dissertations

Student Research

Spring 5-20-2020

Software copyright: fairness analysis through the parallel link between users and authors

Islam Dakroury

The American University in Cairo

Follow this and additional works at: <https://fount.aucegypt.edu/etds>

Recommended Citation

APA Citation

Dakroury, I. (2020). *Software copyright: fairness analysis through the parallel link between users and authors* [Master's Thesis, the American University in Cairo]. AUC Knowledge Fountain.

<https://fount.aucegypt.edu/etds/1452>

MLA Citation

Dakroury, Islam. *Software copyright: fairness analysis through the parallel link between users and authors*. 2020. American University in Cairo, Master's Thesis. *AUC Knowledge Fountain*.

<https://fount.aucegypt.edu/etds/1452>

This Master's Thesis is brought to you for free and open access by the Student Research at AUC Knowledge Fountain. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of AUC Knowledge Fountain. For more information, please contact thesisadmin@aucegypt.edu.

The American University in Cairo

School of Global Affairs and Public Policy

**SOFTWARE COPYRIGHT: FAIRNESS ANALYSIS THROUGH
THE PARALLEL LINK BETWEEN USERS AND AUTHORS**

A Thesis Submitted to the

Department of Law

**in partial fulfillment of the requirements for
the LL.M. degree in International and Comparative Law**

By

Islam Dakrouy

Date

5/19/2020

The American University in Cairo
School of Global Affairs and Public Policy

SOFTWARE COPYRIGHT: FAIRNESS ANALYSIS THROUGH
THE PARALLEL LINK BETWEEN USERS AND AUTHORS

A Thesis Submitted by

Islam Abdel Rehim Abdel Hamid Dakroury

to the Department of Law

May 2020

in partial fulfillment of the requirements for the
LL.M. Degree in International and Comparative Law
has been approved by

Professor Hani Sayed

Thesis Supervisor _____
American University in Cairo
Date _____

Professor Thomas Skouteris

Thesis First Reader _____
American University in Cairo
Date _____

Professor Jason Beckett

Thesis Second Reader _____
American University in Cairo
Date _____

Professor Thomas Skouteris

Law Department Chair _____
Date _____

Ambassador Nabil Fahmy

Dean of GAPP _____
Date _____

DEDICATION

I dedicate this paper to everyone who strives for a world where the share of knowledge and unlimited creativity are the norm. I also dedicate this paper to Dr. Mohamed Kamal Mounir, may he rest in peace, for his efforts during the time when he was leading the Center of Judicial Studies and Researches that encouraged me to seek knowledge and information through graduate studies.

ACKNOWLEDGMENTS

A topic with such complexity requires constant cooperation and coordination. Therefore, I want to thank my brother, Ahmed, for sharing his insights regarding the intellectual property rights of digital content. He made an important contribution for this paper as he suggested certain aspects that influence the regulation of software copying. I also want to thank all my family for their continuous moral support. I would not have made it this far without them.

Moreover, my studies at AUC transformed my intellectual skills significantly. Starting with the ELI program, Ms. Elisabeth Yoder and Mr. Alexander Lewko provided me with a unique learning experience that made me confident in using the English language in everything and everywhere. I could not imagine pursuing my studies at AUC without their experiences. In addition, Ms. Susanne Rizzo further developed my language skills, especially in critical reading, during the class of ENGL. Such learning experiences are truly once in a lifetime opportunity.

Furthermore, my studies in the LL.M. program provided me with substantial legal research skills. The knowledge and skills I gained started with Ms. Diana Van Bogaert. The learning quality that she provided was unmatched compared to any other experience I had during my studies at AUC. Her teaching was a cornerstone in my LL.M. studies. Excluding Ms. Diana's contribution to my degree is like removing the LL.M. altogether.

In addition, Dr. Hedayat Heikal greatly contributed to my studies and in shaping an important part of my thesis which is related to proportionality. Without her teaching it would have been quite difficult to grasp the fundamentals of proportionality. Dr. Dalia Hussein also had an integral part in studying proportionality. Her teaching was like making me reach the full picture of proportionality. Dr. Dalia's teaching also had a substantial contribution to my legal knowledge in fields that I never studied. The learning experience and academic support that Dr. Dalia provided me with were an indispensable part in the LL.M. program.

To further maintain the proper cooperation and coordination required for my research project, it was quite important to find a supervisor that shares my enthusiasm. Dr. Hani Sayed showed that enthusiasm from the first meeting I had with him. This project developed a lot during his supervision. Dr. Hani's comments and suggestions were essential to this paper. From encouraging me to make my own reflection on the caselaw and literature to pointing me towards particular academic references his contribution made the paper reach its current state.

With the accumulation of the academic and moral support, cooperation and coordination was maintained. Dr. Amr Shalakany provided helpful remarks on this paper and encouraged me to make my personal motivation in pursuing such research project visible in the paper. I am also grateful to Dr. Thomas Skouteris for his academic support and the interesting discussion that he, Dr. Hani, and Dr. Jason Beckett conducted in my thesis defense.

That accumulation of the required knowledge would not have also happened without the literature and relevant caselaw used in this paper. It is through this "dialogical network" that made me able to reach new horizons in intellectual property, especially from the contributions made by Dr. William Fisher in the field of intellectual property, in general, and copyright, in particular.

I also had the opportunity to increase my understanding of copyright laws during the class of Legal English that was instructed by Ms. Ola Bakri at AUC. It was a great experience.

Finally, I want to thank my colleagues Ahmed Mohi, Moataz Eidarous, Rami Moustafa, Abdallah el Mallah, Mohamed Samy, Abdel Rahman Nagy, Walid Medhat, Mohamed Hassan, Mohamed Essam, Aly Badrawi, and Hassan Bayoumi for their great collegial spirit that contributed to the shaping of my academic experience at AUC. I also want to extend my thanks to my co-workers Mohamed Ihab, Amr Abdel Halim, Amir Moukhtar, Omar barakat, Amir Abdel Meguid, Morad Salama, Yasser Amer, Tarek Azzazy, Ashraf Said, Baraa Asar, Salah Hegab, and Ahmed el Deeb for their professional and moral support during my studies at AUC.

TABLE OF CONTENTS

I. Introduction	1
II. Copyright and Fairness: Private v. Public	10
A. Utilitarian Theory	10
B. Lockean’s Labor Theory	12
C. Personal Bond Theory	13
D. Social Planning Theory	15
E. The Driving Force Behind the Four Theories	16
III. Fairness in Software Copyright	23
A. The Influence of the US Fair Use Model on Different Jurisdictions Including the Egyptian Context	23
B. The US Model of Fair Use	26
1. Purpose and Character	26
2. Nature of the Copyrighted Work	27
3. Quantity and Importance of the Used Material	28
4. Effect of the Use on the Market	29
a. Fair Use in Action	30
b. Fair Use Evaluation	33
A. The Canadian Fair Dealing	35
B. The UK Fair Dealing	37
C. The Enumerated Permissible Uses (EPU)s	38
D. Reasons to Reconsider the Factors of Fair Use/Dealing	39
1. The Public Benefit Behind the Use	39
2. Non-Contributory Factors to the Fairness Analysis	43
3. The One-Sided Balancing of the Fairness Analysis	48
IV. Other Possible Modes of Defenses in Claims of Software Copyright Infringement	50
A. Originality	50
B. Technological Neutrality	55
C. Proportionality	59
V. A Shift in Perspective	64
A. Identifying a Different Approach	66
B. The Three-Phase Approach	68
C. Roadmap of the Mechanism and its Benefits	69
1. First Stage of the Three-Phase Approach: Transformativeness	71
2. Second Stage of the Three-Phase Approach: Promotion and Dissemination	72
a. Contribution	72
b. Alternate Modes of Dissemination	73
3. Third Stage of the Three-Phase Approach: Active Balance	73
a. Technological Neutrality	74
b. Proportionality <i>Stricto Sensu</i>	74
A. Application of the Three-Phase Approach	75
B. Concerns Over the Three-Phase Approach	76
VI. Conclusion	78

The American University in Cairo
School of Global Affairs and Public Policy
Department of Law

SOFTWARE COPYRIGHT: FAIRNESS ANALYSIS THROUGH THE PARALLEL LINK BETWEEN USERS AND AUTHORS

Islam Dakroury

Supervised by Professor Hani Sayed

ABSTRACT

Until lawmakers harmonize the relationship between copyright owners and users within the context of software copyright, it will remain a controversial topic within the legal field. The ongoing conflict of interests between copyright owners and users along with the increasing complexities of technology make the situation of software copyright more complicated. It is something that the doctrine of fair use/dealing aims to stabilize. In the past few decades, the doctrine of fair use/dealing has evolved towards more complex recording and sharing tools, such as the peer-to-peer networks. However, the court rulings that involve fair use/dealing in software copyright cases contain many inconsistencies. Many of these inconsistencies are caused by the continuous enforcement of software copying restrictions, which have made software copying acts that used to be fair as, instead, copyright infringements. In addition, the test that determines the fairness of copying acts contains some ambiguities. Nevertheless, fair use/dealing has achieved some balance in terms of the legal powers between copyright owners and users and to preserves, to some extent, copyright's true purpose, which is to maintain the flow of knowledge and information through proper promotion and dissemination not only to protect the interests of copyright owners. Furthermore, cases related to software copyright prove that the law should not stand in the way of technological progress or to enact laws that impede its function. Instead, law should guide technology to a safe path that guarantees the best of interests for all parties. This paper argues that reconciling the fair use/dealing with interests of copyright owners and users should be based on examining the interaction between users and authors and its impact on the community at large instead of determining the legitimacy of the consumers' use. This path will require a mechanism that properly weighs the needs and interests of both the copyright owners and users. A mechanism that includes contribution, alternate modes of dissemination, technological neutrality, and proportionality *stricto sensu* is a capable tool for such cases.

I. Introduction

When I was 11 years old, I asked my older brother whether downloading video games were *haram*, forbidden, or *halal*, allowed, in Islam. His answer was that it was a difficult question that I should not overthink it and that I should just play the games, and so I did. However, after several years, I started to give this question a second thought, especially after reading many articles that discuss the issue of software copying. During my random readings, I read about the principle of fair use/dealing for the first time. Out of curiosity, I started to look into this principle, and the more I read about it the more my curiosity was aroused and the complexity of my questions apparent. I explored both of the extremes. The opponents and the supporters of fair use/dealing, but it did not help me to answer my question of whether I, too, was a pirate? In my current research, I gathered my personal, professional, and academic experiences together in an attempt to address such a question. And while this paper does not directly answer the questions that I and many others have, rather, it is to identify a method or set of tools that will help in providing a resolution to these questions.

Software copying¹ is a topic that remains controversial within intellectual property (hereinafter IP) law due to the conflict of interests between copyright owners and users. The former aim to control the reproduction or copying of their content, while the latter seek to access such content regardless of the restrictions.² Such a conflict of interests requires a balanced system so that copyright owners do not impinge on users' access to protected content and users can benefit from their access without affecting the incentive of copyright owners. The problem is that lawmakers' attempts to achieve the required balance between copyright owners and users' rights have not lessened the complexity of software copying and its impact on IP rights due to

¹ Software copying is the act of obtaining a software from a different source without the permission of the copyright holder. It is also called the secondary use of a copyrighted software. For this project, the term software is being used for all intangible content that are associated with hardware. See Merriam-Webster, *Definition of Software*, available at <https://www.merriam-webster.com/dictionary/software>.

² See Anandashankar Mazumda, *Is Copying Ever OK? Software Practices on Line in Copyright Case* (Dec. 2017), available at <https://biglawbusiness.com/is-copying-ever-ok-software-practices-on-line-in-copyright-case/>. This article reflects on the topic of interoperability, which is a term used to describe the communication between hardware and software in order to make a useable system or device. The article focuses on the case of *Oracle America, Inc. v. Google, Inc.*, No. 17-1118 (Fed. Cir. 2018), which the Federal Circuit recently remanded the case to the lower district court, while Google filed a petition to the Supreme Court to hear the case in order to determine whether APIs (application programming interfaces) that are used for interoperability purposes are copyrightable. In this case, the Federal Circuit found that Google's act in copying the codes of Java into their Android operating system is not fair use as the copying act was for commercial purposes, non-transformative, and not minimal. The article was written before the Federal Circuit's verdict. However, the future of interoperability in issues of software copying is still not definitive as the Supreme Court is yet to render its decision.

the increasing restrictions on accessing software content.³ In addition, many states and multinational companies hide the true nature of software copying, and try to stop any efforts that would make software copying a legitimate act. They do this by imposing restrictive measures on accessing copyrighted content based on the perception that “copying without the payment of a fee raises a specter of a lost opportunity for additional profit.”⁴ The complexities that surround software copying in IP law make the application of the doctrine of fair use⁵ or fair dealing⁶ quite challenging due to the process of balancing between two conflicting sets of interests.

The problem of achieving balance in fair use began way before even the emergence of software copying itself. The very first modern copyright law, which is the Statute of Anne, was passed by the English Parliament between 1709 and 1710. The Statute was mainly an attempt to restrain the monopoly of publishers by limiting the indefinite copyright term that existed before the enactment of the Statute. Instead, it had a fixed term of 14 years subject to renewal by the author,⁷ so publishers were no longer able to own the publishing rights of the authors’ content indefinitely. However, publishers viewed this Statute as not within their best interest, so they managed to convince the Parliament that copyright protects the author’s creation under natural law in order to limit the abridgments or copying of published content. In this way they made it about the authors’ and publishers’ interests through these rights,⁸ which, later on, caused a debate amongst legal practitioners. There are parties who saw the Statute as a regulation that protected authors and publishers from users, while others realized that its real objective was to

³ See Leslie Harris, *PIPA / SOPA and the Online Tsunami: A First Draft of the Future* (Feb 2012), available at <http://abcnews.go.com/Technology/pipa-sopa-online-tsunami-draft-future/story?id=15500925>. PIPA (Protect IP Act) and SOPA (Stop Online Piracy Act) were proposed regulations in the US Congress that aimed to impose more restrictive and takedown measures for copyright infringements over the internet. After intense protests, the two bills were postponed indefinitely.

⁴ LAYMAN PATTERSON, *UNDERSTANDING FAIR USE*, 263 (1992). This statement reflects the irrelevance of measuring the copyrighted matter with an economic harm as such norm can lead to inexistent or non-factual financial impact.

⁵ Fair use is a doctrine in the law of the US that permits the act of using a protected content without violating the IP rights of the creator. It is incorporated into the Copyright Act of 1976 under section 107.

⁶ Fair dealing is the equivalent to the US doctrine of fair use. Fair dealing is found in many of the common law jurisdictions of the Commonwealth of Nations like Canada.

⁷ LYMAN PATTERSON ET. AL., *THE NATURE OF COPYRIGHT: A LAW OF USERS' RIGHTS* 27-33 (1991). Acquiring a general knowledge about the legal history of copyright can reveal the turning points that caused imbalances between the public interest of users and private interest of copyright owners.

⁸ *Id.* at 45.

protect the public from the publishers' excessive control over the market in order to create a safer environment for accessing knowledge and information.⁹

Although the Statute of Anne did not manage to fully achieve its real objective, a case followed which made it clear that copyright was not just about the rights of authors and publishers. In 1740, the Court of Chancery managed to establish the doctrine of "fair abridgement" in *Gyles v. Wilcox* (hereinafter *Gyles*) in England.¹⁰ The case was primarily related to whether the act of copying a published book leads to an infringement of the author's rights or not. In this case, the Court established the doctrine of fair abridgment. This doctrine permitted the unauthorized abridgement or copying of copyrighted works under certain circumstances. Lord Hardwicke stated in his ruling that there were copying acts that classify as infringement, but that does not mean to restrict people from creating "a real and fair abridgment."¹¹ Over the years, the doctrine of fair abridgement changed into fair use and fair dealing doctrines.

In 1841, the US Supreme Court ruled in a case similar to *Gyles* called *Folsom v. Marsh* (hereinafter *Folsom*).¹² The Court acknowledged that there was something called fair use, but it concluded that there was no fair use as the Court considered derivative works as infringing on the right of the author,¹³ which is contrary to the concept of fair abridgment in *Gyles*. This is when the fair use doctrine was adopted in the US as an exception to the authors' exclusive rights, and consisted of four factors, also known as the fair use test or four-factors test, that

⁹ *Id.* at 134-145. This part of the book goes through a certain period in the history of copyright development. This part showed that the main purpose of copyright started to fade away due to the increasing adoption of protective measures for authors. In addition, the public interest was not presented while enacting each new restriction. For instance, the enactment of the US Copyright Act in 1976 ". . . the product of two decades of negotiation by representatives of creators and copyright-using industries, supervised by the Copyright office, and to a lesser extent, by Congress". However, there were no representatives for the public interest.

¹⁰ *Gyles v. Wilcox*, 26 Eng. Rep. 489, 2 Atk. 141 (1740) (No. 130). As cited by PIERRE LEVAL, TOWARD A FAIR USE STANDARD, 103 Harv. L. Rev. 1105, 1105 (1990).

¹¹ LEVAL, *supra* note 10, at 1112. See SIMON FRANKEL ET. AL., BAD FAITH AND FAIR USE, 60 J. Copyright Soc'y U.S.A. 1, 17 (2012). In *Gyles v. Wilcox*, Lord Hardwicke did acknowledge that where a copy of a book is exactly the same as the original the copyist can be liable for infringement. However, he excluded from such acts of copying other attempts which aim to transform the original content into something that is also useful. He stated that "[w]here books are colourably shortened only, they are undoubtedly infringement within the meaning of the [Statute of Anne] . . . 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 . . . the invention, learning, and judgment of the [secondary] author is shewn in them . . .".

¹² *Folsom v. Marsh*, 9 F. Cas. 342 (C.C.D. Mass. 1841). The court found that in cases of determining whether the copying act is fair use ". . . we must often, in deciding questions of this sort, 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".

¹³ FRANKEL, *supra* note 11, at 18-19.

determine whether the defendant's use is fair. This test will be further discussed in detail in the next chapters.

On the other hand, in the UK the fair dealing doctrine was codified in the Copyright Act of 1911 as a replacement of the previous fair abridgment doctrine.¹⁴ In addition, fair dealing was adopted in other Commonwealth countries, like Canada and Australia, and Continental European countries,¹⁵ like Germany and France. There were also other countries that adopted a mixed model of the US and UK's doctrines, like Taiwan and South Korea.¹⁶ Another notable example, of the mixed doctrines of fairness is the recent South-African parliament deliberations of integrating fair use provisions into its fair dealing model.¹⁷ In chapter three, fair dealing will be further discussed.

After *Folsom*, the courts in the US started to rely on the principle of fair use to determine the legitimacy of copying acts. However, courts faced difficulties while applying fair use, and in certain cases these difficulties were very critical to the degree of courts' reaching 4-4 decisions.¹⁸ Although the 4-4 cases infrequent, it does not mean that these instances were unimportant as they reflected a sort of unpredictability and inconsistency in court rulings in cases of copyright.¹⁹ For instance, in *Williams & Wilkins Co. v. United States*,²⁰ the Court of Claims had a 4-4 decision that was later affirmed by a *per curiam* opinion by the Supreme Court. The decision held that the act of photocopying articles for scientific research does not infringe the copyright of the authors, but it is possible that things would have gone differently had the Court reached a full decision from the full panel of judges.²¹ In continuation of the

¹⁴ SEAGULL SONG, REEVALUATING FAIR USE IN CHINA - A COMPARATIVE COPYRIGHT ANALYSIS OF CHINESE FAIR USE LEGISLATION, THE U.S. FAIR USE DOCTRINE, AND THE EUROPEAN FAIR DEALING MODEL, 51 IDEA 453, 468-469 (2011). Making a comparative observation over other copyright statues of certain legal systems, such as UK, will reflect the influence of the US model of fair use over these jurisdictions.

¹⁵ In general, Europe follows a stricter version of fair dealing which is called the enumerated permissible uses. This system follows a list of permissible uses that are excluded from copyright protection. This approach will be also mentioned in chapter III of this paper.

¹⁶ SONG, *supra* note 14, at 454-455.

¹⁷ Intellectual Property Watch, *Defending Fair Use In South Africa*, available at <http://www.ip-watch.org/2018/12/04/defending-fair-use-south-africa/>. Another example of the increasing influence of the US model over distant legal systems.

¹⁸ PAUL GOLDSTEIN, FAIR USE IN A CHANGING WORLD, 50 J. Copyright Soc'y U.S.A., 133 (2002-2003). The technological progress is a main contribution to judgments' indeterminacy in the application of fair use.

¹⁹ *Id.* at 133-134. In addition to the complexities related to technological aspects, the process of balancing between the conflicted interests further increase courts' susceptibility of more indeterminacies in their rulings.

²⁰ *Williams & Wilkins Co. v. United States*, 420 U.S. 376 (1975).

²¹ MICHAEL MADISON, A PATTERN-ORIENTED APPROACH TO FAIR USE, 45 Wm. & Mary L. Rev. 1570-1571 (2004). In Madison's analysis, he stated that this specific case happened three years before the codification of fair use

theme of inconsistencies in court decisions regarding fair use, in *American Geophysical Union v. Texaco, Inc.*,²² the US Court of Appeals for the Second Circuit held that copying journal articles for research purposes does not constitute an act of fair use. Although the last two mentioned cases share the same copying act, the courts reached different decisions.²³

Aside from the indeterminate courts' decisions, there was another factor that kept evolving at that time, during 1970, which is technology. As technology evolved, the legitimacy of acts of copying became more difficult to determine. This is seen in several landmark cases in the US starting in the 1980s. In *Sony Corp. of Amer. v. Universal City Studios, Inc.* also known as the *Betamax* case,²⁴ the US Supreme Court found that recording a show which is broadcast from a television for time shifting²⁵ purposes was an act of fair use, not a violation of IP rights. This particular court ruling was the first step towards lessening the limitations on software copying, and its impact is reflected in many different contexts. For instance, in educational activities, professors and teachers can show students any live recorded lectures or scientific content for academic purposes without violating the IP rights of the creator.

On the other hand, in countries that have adopted the fair dealing doctrine, as seen in the case of *Entertainment Software Association v. Society of Composers* (hereinafter *ESA*),²⁶ the Supreme Court of Canada adopted a technology-neutral approach to copyright law. It held that the means of obtaining a piece of software, whether receiving a durable copy of the protected

in the Copyright Act of 1976 in the US, so the Court missed the opportunity to provide a legal contribution to the principle of fair use before it gets codified.

²² *Am. Geophysical Union v. Texaco, Inc.*, 60 F.3d 913 (2d Cir. 1995).

²³ *Id.* at 931. The Second Circuit stated that “[w]hatever the situation may have been previously, before the development of a market for institutional users to obtain licenses to photocopy articles, see *Williams & Wilkins*, . . . it is now appropriate to consider the loss of licensing revenues in evaluating ‘the effect of the use upon the potential market for or value of’ journal articles. It is especially appropriate to do so with respect to . . . a publication as to which a photocopying license is now available”. It is to be noted that *Texaco* came after *Williams & Wilkins* by 20 years, which is long after the enactment of the US Copyright Act in 1976 and the codification of the fair use doctrine, so these different circumstances ought to shake courts' opinions. Although *Texaco* did file a petition to the US Supreme Court to hear the case, it entered a settlement with American Geophysical Union shortly after. Thus, the Supreme Court did not have the opportunity to settle this matter.

²⁴ *Sony Corp. of Amer. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984), available at <https://supreme.justia.com/cases/federal/us/464/417/>.

²⁵ The time shifting act is when someone records anything from a live broadcast, whether from a TV or radio, in order to be viewed or listened to after the live broadcast.

²⁶ *Entertainment Software Assn v Society of Composers, Authors and Music Publishers of Canada*, 2012 SCC. See THE COPYRIGHT PENTAGONY: HOW THE SUPREME COURT OF CANADA SHOOK THE FOUNDATIONS OF CANADIAN COPYRIGHT LAW, (Michael Geist ed.) iii-iv (2013). The principle of technological neutrality developed by the Supreme Court of Canada is a breakthrough in cases of copyright because it allows courts to address the technological aspect in software copying cases as a threshold that determines whether copyright owners used technology to abuse their rights in obtaining incentives.

content from a store, in the mail or downloading it from the internet is neutral from the perspective of determining the legality of copying acts. The Court described the internet as a “technological taxi” meaning that its objective is just to transfer content among users, and further added that paying additional payments for a downloaded copy violates the principle of technological neutrality.

The *Betamax* ruling set the foundation for fair use in the home video market. The legal consequences of the US Supreme Court’s decision led to a challenging situation as to whether any device with copying or recording capabilities could be considered as infringement in copyright law. The situation became even more complicated with the further technological advancement and the emergence of different file sharing technologies within a local network, such as a computer home network, and peer-to-peer (P2P) file sharing over the Internet.

With the ongoing growth of file sharing technologies, the Digital Millennium copyright act (DMCA) was signed in 1998 in the US.²⁷ The act criminalizes any production or circulation of any sort of technology, devices or services that bypass digital rights management (DRM), and it also extends the reach of copyright to online content. The first major effect of the DMCA happened in 2001 in *A&M Records, Inc. v. Napster* (hereinafter *Napster*).²⁸ Several other companies including Sony, Universal, and Warner Bros, were also claimants against Napster, a P2P file sharing service that allowed its users to place-shift or space-shift music files.²⁹ The US Court of Appeals for the Ninth Circuit considered both Napster and its users as being involved in copyright infringement, and argued that Napster should monitor copying acts on its server. Napster counter-argued that it was too difficult to monitor millions of copyright content uploaded to their server, so the Court changed the mechanism of copyright monitoring. It decided that it is the copyright holders’ responsibility to inform Napster of any copyright infringement and that Napster should comply with these requests. As a result, the coexistence of the DMCA and the fair use doctrine became much more difficult.

In order to use a right, everyone should first understand what constitutes that right and what does not. It needs to be clear to all people what the legal entitlements granted to them are by a certain rule and the limits or duties for adhering to it. Therefore, knowing what software

²⁷ Pub. L. No. 105-304, 112 Stat. 2860 (1998). See GOLDSTEIN, *supra* note 17, at 144-145.

²⁸ *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004 (2001).

²⁹ Place-shifting or space-shifting allows users to store content, such as music files, on one device that can be accessed from a different place through a separate device.

copying truly is beneficial to everyone as it often happens that someone violates copyright without even knowing it.³⁰ On the other hand, many individuals are not even aware of what the doctrine of fair use/dealing is, which legitimatizes the act of software copying in certain situations. Another important consideration related to the limitations on software copying is the complexity behind its function. The situation of software copying gets even more complicated because of the scarcity of legal literacy as most of the existing writings are intended for law experts. For that reason, by writing a simplified and also detailed version, of the legal aspects of software copying intended for users, users will have a better understanding of the legal aspects of software copying which will make them not just capable of properly exercising their fair use/dealing right, but also have a role in self-monitoring any attempts that may hinder the progression of fair use/dealing. It is this point that prompted the Council of Europe to acknowledge that internet users are not mere consumers, but as independent individuals who can contribute to the wellbeing of a society through the government protection of their freedom over the internet.³¹ This acknowledgment can provide crucial insights to lawmakers in helping them to properly address the doctrine of fair use.

Nowadays, there are aspects of software copying left unanswered. For instance, there is no consensus about the possibility of creating a different set of standards or rules for fair use/dealing that can regulate the access to any copyrighted software. In addition, there is ambiguity regarding the objective of fair use/dealing because it is not clear whether fair use is an exception to the exclusive rights of the author or a legal entitlement for users. This ambiguity is reflected in cases like *Betamax* and *Napster*. Fair use was upheld in the first case, while in the second one the Court found that there was copyright infringement. In addition, users took no part in any of these cases. Yet, users had a major interest in the ruling of the two cases as the *Betamax* case involved a product that would be used by home users, and *Napster* was based on a service that was also utilized by users, so how can lawmakers properly address the issue of software copying acts? Is it by restraining users and giving copyright owners more protection or vice-versa? Ronald Coase stated that where a choice has to be made in protecting a certain

³⁰ See also R. Anthony Reeves, *Innocent Infringement in U.S. Copyright Law: A History* (July 2008) 183-184 available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1153602. Therefore, court rulings should be more consistent in order to provide a coherent legal framework that guides users during their interactions with protected content.

³¹ Council of Europe, *Internet Users Rights*, available at <https://www.coe.int/en/web/internet-users-rights/home>. Although the Council of Europe does not specifically refer to copyright, the fact that it sees users as contributors to the internet in general and that state actors should work on providing a safe haven for internet users shows that their interests should be taken under great consideration when crafting non-users' entitlements.

right restraining a party from the other will only allow the former to harm the latter, so addressing such cases should look at the problem from the perspective of which party should be allowed to harm the other.³² However, in software copyright cases, courts need, in the first place, a mechanism that allows them to inspect the actions of both the plaintiff and defendant and equally weigh their conflicted interests in order to determine which party it is that should be allowed to harm the other.

This paper attempts to address the issue of dealing with the legitimacy of software copying acts in current scholarship. This issue is being addressed in this paper from the point of view of what sorts of considerations that courts should focus more on while making their judgments. In observing the legal history of copyright and the relevant literature, one notes that no matter how many laws are promulgated or exceptions that are listed for the uses of copyrighted works are made, it will not lead to productive outcomes. This is because copying will continue to occur due to the increasing restrictions on accessing the protected content, especially when it comes to software copyright cases. In other words, crafting legal limits just for the sake of restraining users in controlling their access to protected content would result in, similar to what Coase argued, having the users continuously harm the copyright owners.

In addition, technology continues to evolve. The more it progresses the more copying tools emerge, which makes rules and standards that existed before the latest development of technology quickly obsolete. Law and technology have opposite characteristics. Law has limits, while technology is meant to exceed the limits in order to reach higher achievements. It is not a question of surrendering to the difficulty of software copying cases, but, on the contrary, to realizing that law has finite capabilities compared to the infinite ones of technology. For this reason, it is important to examine the main purpose of copyright laws in order to readapt it within the context of software copyright and in so doing create a system that is capable of limiting the inconsistencies in cases of software copyright.

By shifting to a parallel system that focuses on the characteristics of the conduct between authors and users, it will be possible to overcome the inconsistencies of the fair use/fair dealing doctrines so that societies can reach a copyright system that works for everyone at all times,³³

³² RONALD COASE, THE PROBLEM OF SOCIAL COST, 3 J.L. & Econ. 1, 2 (1960).

³³ CHRISTINA MULLIGAN, COPYRIGHT WITHOUT COPYING, 27 Cornell J. L. & Public Policy 469, 482 (2017). The nature of software copyright creates a huge flow of continuous access to content as it becomes a lot easier and quicker for users to interact with such content every day. As Fisher noted in his book, in many different societies, access to different types of entertainment, such as films, has become equally important compared to other

especially that people engage with varied forms of content on a daily basis. It is difficult to assert that there is a win-win scenario in the realm of copyright, but it is not too difficult to realize that the stakes are too high for doing nothing in such a context. As will be seen in this paper, a verdict may result in termination of a service or loss of an investment causing many people to lose their jobs or lead to the prevention of millions of people from accessing certain content. Therefore, it is not a question of who should win or lose in copyright cases, rather, it is to be properly equipped with the required knowledge and tools in order to make the decision of which party should prevail. This parallel system will offer lawmakers an alternate path for addressing the issue of software copying more effectively and to focus on what copyright should allow instead of what it should not permit.

In chapter two, the issue of software copying will be explored based on the available theories of copyright protection and how the issue creates tension between private and public interests. Chapter three will begin with a brief discussion on the influence of the US model of fair use over other countries. In addition, a demonstration of fair use/fair dealing tests with a focus on recent cases will be presented along with a critique of their vulnerabilities that make these tests inconsistent. In chapter four, other approaches will be presented that can also deal with the issue of software copyright such as originality, technological neutrality and proportionality. Chapter five will illustrate a parallel system that examines the behavior of both the plaintiff and defendant in order to properly conduct the balancing process in claims of copyright infringement. Chapter six concludes with final remarks on the future of software copyright in light of this research.

essentials of living, such as food. See WILLIAM FISHER, PROMISES TO KEEP, 182 (2004). Therefore, copyright systems should be appropriate to everyone.

II. Copyright and Fairness: Private v. Public

The theoretical aspect of IP in general and copyright in particular rests on four main theories.³⁴ Although these theories are related to property in general, and not specifically IP, there are certain court opinions related to copyright cases that have been influenced by some aspects of these theories. Although the philosophy of IP is beyond the scope of this paper, it is important to be familiar with these theories in order to identify the driving force behind the four theories of property and the relevant case law in the context of copyright so that one can understand how these theories influence courts' application of the fair use/fair dealing doctrine. This study will aid in identifying an approach that is capable of providing a stable framework for courts in conducting the balancing process.

A. Utilitarian Theory

First, there is the utilitarian perspective which focuses on achieving “the greatest good for the greatest number,” a theory that has noticeable influence in American jurisprudence.³⁵ The copyright protection from a utilitarian point of view is justified by maximizing the well-being of the entire society. To achieve the utilitarian goal, lawmakers need to maintain a balance between the protection granted to authors in guaranteeing a reward for their works as an incentive for them to keep being creative, and the public participation in these works, by allowing widespread public access to these works without heavily damaging the benefits of authors.³⁶ To achieve this utilitarian objective, governments rely on creating a mixture of incentives and sanctions in order to stimulate the authors in maintaining the flow of innovation and to persuade the public to provide incentive to these authors.³⁷ Thus, by guaranteeing the proper incentive to creators, they would ensure the smooth dissemination of their content, while

³⁴ WILLIAM FISHER, THEORIES OF INTELLECTUAL PROPERTY, New Essays In The Legal And Political Theory Of Property, 5 (Cambridge University Press, 2001). See WILLIAM FISHER, RECONSTRUCTING THE FAIR USE DOCTRINE, Harvard Law Review, Vol. 101, No. 8, 1686-1687 (1988). See NATALI HELBERGER ET. AL., NO PLACE LIKE HOME FOR MAKING A COPY: PRIVATE COPYING IN EUROPEAN COPYRIGHT LAW AND CONSUMER LAW, 22 Berkeley Tech. L.J. 1061, 1067-1068 (2007).

³⁵ *Id.* FISHER, THEORIES OF INTELLECTUAL PROPERTY, at 9. “the greatest good for the greatest number” is a paraphrase for Jeremy Bentham’s quote that “the greatest happiness of the greatest number is the foundation of morals and legislation”.

³⁶ FISHER, *supra* note 34, at 1687-1688.

³⁷ William Fisher, *CopyrightX: Lecture 4.1, Welfare Theory: The Utilitarian Framework*, 4:42-5:13 available at <https://www.youtube.com/watch?v=3ISstJySCWs&feature=youtu.be>.

users would refrain from unlawful copying attempts in order to maintain the flow of knowledge and information.³⁸

The idea of balancing between authors' incentive to create and social welfare is not absent from the field of copyright. This is apparent in the *Betamax* case as the Court did acknowledge that such balancing is the purpose of copyright, in general, and fair use, in particular.³⁹ The utilitarian approach can also explain the argument which contends that copyright is not a regulatory system or that it is not strictly about property, rather, copyright is a matter of policy, especially in the field of software copyright.⁴⁰ This argument proposes that software copyright differs from tangible property and, thus, should be inserted under a system of policy considerations instead of property laws. It is important to note, however, that copyright should work for any content, tangible or intangible, and for everyone. In this way, the concept of property is not in the author's creation itself, rather, it is the "bundle of rights" that are granted to authors in relation to their work or property.⁴¹ This perspective makes the application of the utilitarian theory more focused on the relation between authors and the public rather than having the protected property at the center of this relation. By doing so, it avoids reducing the progress of social welfare in favor of advancing the property protection to disproportionate levels. Therefore, the challenge in the application of copyright, especially in software copying, is not in the tangibility or intangibility of the protected content. The main concern should be

³⁸ *Id.*

³⁹ FISHER, *supra* note 34, at 1688-1689. In referring to the balancing nature of copyright, the Supreme Court stated in its ruling in *Betamax* that "[i]n a case like this, in which Congress has not plainly marked our course, we must be circumspect in construing the scope of rights created by a legislative enactment which never contemplated such a calculus of interests. In doing so, we are guided by Justice Stewart's exposition of the correct approach to ambiguities in the law of copyright:

'The limited scope of the copyright holder's statutory monopoly . . . reflects a balance of competing claims upon the public interest: Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of . . . arts. The immediate effect of our copyright law is to secure a fair return for an `author's' creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good. `The sole interest of the United States and the primary object in conferring the monopoly,' . . . `lie in the general benefits derived by the public from the labors of authors.' . . . When technological change has rendered its literal terms ambiguous, the Copyright Act must be construed in light of this basic purpose'". *Betamax*, *supra* note 24, at 431-432.

As to the balancing nature of the fair use doctrine, The Supreme Court stated, in a dissenting opinion, that "The fair use doctrine must strike a balance between the dual risks created by the copyright system: on the one hand, that depriving authors of their monopoly will reduce their incentive to create, and, on the other, that granting authors a complete monopoly will reduce the creative ability of others". At 480.

⁴⁰ ADAM MOSSOFF, IS COPYRIGHT PROPERTY?, 33-34 (2005).

⁴¹ See also WESLEY HOHFELD, SOME FUNDAMENTAL LEGAL CONCEPTIONS AS APPLIED IN JUDICIAL REASONING, 23 Yale L.J. 16, 22-23 (1913-1914).

centered on the actual balancing process between the authors' bundle of rights and public access to their works. This is reflected in the Supreme Court's, albeit dissenting opinion, in *Betamax* regarding the balancing nature of the fair use doctrine in considering the proper incentive for creators and the rest of the society's interest in maintaining adequate access to protected content in order to increase people's creativity.⁴²

Although the utilitarian approach seems promising, there is no mechanism to determine the appropriate incentive for authors and the extension of their exclusive rights and to maintain the proper dissemination of their works in a society.⁴³ Therefore, the idea of balancing the interests of both the authors and consumers is a crucial aspect of IP in general and copyright specifically, but the lack of a mechanism that is capable of striking that balance makes the application of the utilitarian approach difficult.

B. Lockean' Labor Theory

The second approach to copyright protection is based on the labor theory of John Locke.⁴⁴ Under Lockean theory, everyone has "a property in his own person," and such property is reflected in the person's work. In addition, a society will not be able to prosper unless a person shows labor and skill and obtains the fruits of such work.⁴⁵ Furthermore, Locke puts a certain condition for a person to claim property rights in his or her creation which is to make sure that "there is enough and as good left in common for others" by not causing harm to other people, such as becoming poorer.⁴⁶ This could also refer to situations where copyright owners aim to gain a monopoly or market dominance over their creation, which can hinder the ability of potential creators from using the monopolized work in their content.⁴⁷

The distinction between utilitarianism and naturalism is that the former leans towards the collective benefit of a society through the dissemination of the authors' works, while the latter sees that the improvement of a society lies in giving the priority to rewarding the authors for

⁴² See *supra* note 39 and accompanied text.

⁴³ FISHER, *supra* note 34, at 12.

⁴⁴ *Id.* at 14-15. Although the Lockean theory did not include anything explicit to IP, it did have an impact on the philosophy of IP. See PETER DRAHOS, *A Philosophy of Intellectual Property*, 56 (2016). Drahos mentions that Lock's taking on property "... was part of a wider philosophical agenda on the nature of government" and that he most likely did not have IP in mind when addressing the concept of property.

⁴⁵ *Id.*

⁴⁶ *Id.* at 3

⁴⁷ WENDY GORDON, *A PROPERTY RIGHT IN SELF-EXPRESSION: EQUALITY AND INDIVIDUALISM IN THE NATURAL LAW OF INTELLECTUAL PROPERTY*, 102 *Yale L.J.* 1533, 1581-1582 (1993).

their creations, which can be observed in *Harper & Row v. Nation Enterprises* (hereinafter *Harper*). Here, the US Supreme Court affirmed that nothing should hinder the process of providing laborers the fruits of their work.⁴⁸ However, the Lockean “person’s labor” aspect reveals that the theory does not necessarily refer to creators only. Statements like "a Property in his own Person" and "Labour of his Body, and the Work of his Hands" could refer to the act of creation and copying as well.⁴⁹ By referring to the labor as a “person,” and not author, creator or owner, it could also include the works of copyists.

In addition, taking the aspect of labor from a perspective of physical works limits the potential of the Lockean theory to extend in the area of software copyright. This is because in advanced technology physical labor can take different forms. For instance, a desktop can be a kind of workbench to create designs from – replacing a hammer and chisel with a mouse and keyboard to design real-life looking sculptures on the computer. Thus, the Lockean approach does fit with the context of software copyright.

C. Personal Bond Theory

A third approach moves the Lockean’s labor theory to another extreme which is the personality theory. This theory is most apparent in Europe.⁵⁰ The personality perspective considers private property rights as an essential pillar for upholding human needs and interests.⁵¹ This approach considers that authors should be able to determine which parts of their works are to be used and to what extent in order to avoid the misrepresentation of their creations, which can lead to the sense of guilt that their works did not benefit other people due to its incomplete status.⁵²

⁴⁸ *Harper & Row v. Nation Enterprises*, 471 U.S. 539, 546 (1985). The Supreme Court stated that “[w]e agree with the Court of Appeals that copyright is intended to increase and not to impede the harvest of knowledge. But we believe the Second Circuit gave insufficient deference to the scheme established by the Copyright Act for fostering the original works that provide the seed and substance of this harvest. The rights conferred by copyright are designed to assure contributors to the store of knowledge a fair return for their labors”. See FISHER, *supra* note 34, at 1689. In addition, there is a notable statement from Lord Mansfield, a barrister, politician and judge, which refers to the person’s labor and the benefit of a society: “[W]e must take care to guard against two extremes equally prejudicial; the one, that men of ability, who have employed their time for the service of the community, may not be deprived of their just merits, and the reward of their ingenuity and labour; the other, that the world may not be deprived of improvements, nor the progress of the arts be retarded”.

⁴⁹ FISHER, *supra* note 34, at 15.

⁵⁰ *Id.* at 6.

⁵¹ *Id.* at 19-20.

⁵² *Id.* at 19

Therefore, under the personality theory, authors are considered to have a moral bond between their works and themselves, and this bond must be respected.

In addition, property rights are also required in order to protect the privacy of the authors so that they can choose whether to be left alone or engage with other people; this helps the authors to be independent and better-equipped to determine their own social and financial status.⁵³ For example, German architect Meinhard von Gerkan designed a ceiling that was quite creative for the German railway station Deutsche Bahn.⁵⁴ However, the station owners found the design to be too expensive and decided to build a new and cheaper one made by another architect. Von Gerkan filed a lawsuit against the railway station claiming that altering his original design was equivalent to "ripping pages out of a novel." The Berlin Superior Court of Justice found that the railway station did indeed violate Von Gerkan's rights by defacing his work of art and ordered it to rebuild the ceiling, even though it cost about thirty million Euros. The personal bond theory can be also inferred from US caselaw. For instance, in *Harper* the US Supreme Court found that the publication of quotations from a 500-page memoir was not considered fair use, even though the memoir related to historical facts that mattered to the public interest.⁵⁵

It is difficult for lawmakers to determine what the aspects of property are that should be privatized and parts that should be made publicly available due to the autonomy that results from the personality approach.⁵⁶ In addition, there is disagreement whether such autonomy actually allows the authors to restrict the dissemination of their works once they go public as the release of the content to the public means that the works no longer solely belong to the author.⁵⁷ Therefore, and within the European context, it suffices in certain cases to give

⁵³ *Id.*

⁵⁴ William Fisher, *CopyrightX: Lecture 2.3, Fairness and Personality Theories: Personality*, 0:13-1:28 available at <https://www.youtube.com/watch?v=hsAcrcveg6k&feature=youtu.be>.

⁵⁵ *Harper*, *supra* note 48, at 549. In reversing the decision of the Court of Appeals for the Second Circuit, the Supreme Court stated that ". . . The Nation has admitted to lifting verbatim quotes of the author's original language totaling between 300 and 400 words and constituting some 13% of The Nation article. In using generous verbatim excerpts of Mr. Ford's unpublished manuscript to lend authenticity to its account of the forthcoming memoirs, The Nation effectively arrogated to itself the right of first publication, an important marketable subsidiary right . . . we find that this use of the copyrighted manuscript, even stripped to the verbatim quotes conceded by The Nation to be copyrightable expression, was not a fair use within the meaning of the Copyright Act". This statement is an indicator that the Supreme Court agrees with the rationale of the District Court that "the totality of these facts and memoranda, collected together with Ford's reflections that made them of value to The Nation, [and] this . . . totality . . . is protected by the copyright laws". At 544.

⁵⁶ FISHER, *supra* note 34, at 20-21.

⁵⁷ *Id.* at 21.

attribution to the original work in order to respect the moral rights of the author.⁵⁸ The argument for the authors' right to restrict further communication of their content is based on the inalienability of their interest in deciding not only a copyist's right to speak, but also the copyright owner's "right to refrain from speaking," which can be seen in *Harper*.⁵⁹

On the other hand, the counter-argument is that the expression of an author is an external facet of their personality, which makes these expressions alienable as they are separate from their talents.⁶⁰ Moreover, it is difficult to claim that others cannot copy the author's content, not just because the content is exposed to the public, but also because the copy is someone else's expression owned by a different personality.⁶¹ A concern that arises against such copying attempts is that they can be made through an automated process that does not require any skill to make at all.⁶² Thus, such copying attempts do not reflect an expression of an independent personality because they are just a production of a machine. Nonetheless, and as elaborated in the Lockean theory, signs of labor and skill can be shown without necessarily wielding a hammer and chisel, so making derivative works on a computer from real life designs do not negate the idea that there is a personal bond between the derivative work and the copyist, which can be reflected from Lord Hardwicke's statement in *Gyles* to not "restrain persons from making a real and fair abridgment, for abridgments may with great propriety be called a new book, because . . . the invention, learning, and judgment of the [secondary] author is shewn in them . . ."

D. Social Planning Theory

Finally, there is the social planning theory that aims at achieving an overall vibrant culture.⁶³ This theory is similar to the utilitarian approach in one aspect, but different in another.⁶⁴ The similarity is that both the utilitarian and social planning theories share the vision of the wellness of a society, but they differ in terms of the plans that lead to such a good society as the views

⁵⁸ William Fisher, *CopyrightX: Lecture 9.3, Fair Use: Other Approaches*, 9:56-10:18 available at https://www.youtube.com/watch?v=sgY_lmxJwUg&feature=youtu.be.

⁵⁹ *Harper*, *supra* note 47, at 555. The Court stated that ". . . the author's right to control the first public appearance of his undissemated expression will outweigh a claim of fair use". See FISHER, *supra* note 34, at 21. See FISHER, *supra* note 33, at 1690.

⁶⁰ *Id.* FISHER, at 21

⁶¹ *Id.*

⁶² *Id.* See JUSTIN HUGHES, THE PHILOSOPHY OF INTELLECTUAL PROPERTY, *Georgetown Law Journal* 77, 338 (1988).

⁶³ *Id.* at 22-23.

⁶⁴ *Id.*

of the social planning theory are more developed than the utilitarian one. Therefore, the social planning theory starts from a substantive vision of what is good, and then seeks to identify a system of IP rights that are most consistent with such a vision.

Although there is consideration to provide a balanced incentive to foster creativity and also the distribution and use of the creations, the focus under the social planning approach is more apparent in the consumers' role in the flourishing of cultural aspects of societies.⁶⁵ To achieve an appealing culture, consumers should have access to large collections of knowledge and information – as wide as possible – so that they can effectively participate in the society. This is done by increasing their intellectual skills through expressing themselves in a diverse culture.⁶⁶ In addition, to further increase the creativity and ability to communicate within a society, consumers should have access to complex content so that the society's intellectual skills are stimulated.⁶⁷ This theory is reflected in the dissenting opinion of the US Supreme Court in *Harper*, which saw that authors' rights in copyright should serve the good of the public, not just their own interests.⁶⁸ The idea of a flourishing culture is to make a society not just constituted of passive consumers, rather, to have active ones in order to create a meaningful culture with their active participation in shaping it.⁶⁹

The main problem with the social planning approach is that it does not provide guides for a society to choose its development path, whether copyright or another branch of IP or a mixture of IP fields that might dominate a certain culture.⁷⁰ This makes the social planning theory unable to offer a workable plan to achieve its goals.

E. The Driving Force Behind the Four Theories

These four approaches – the utilitarian, Lockean, personal-bond and social planning – do not operate separately, rather, they are intertwined with each other. Because they represent

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Harper*, *supra* note 48., at 580. The dissenting opinion viewed that “Because I disagree with the Court's fair use holding, it is necessary for me to decide the threshold copyrightability question. ‘The enactment of copyright legislation by Congress under the terms of the Constitution is not based upon any natural right that the author has in his writings . . . but upon the ground that the welfare of the public will be served and progress of science and useful arts will be promoted by securing to authors for limited periods the exclusive rights to their writings.’ . . . Congress thus seeks to define the rights included in copyright so as to serve the public welfare, and not necessarily so as to maximize an author's control over his or her product”.

⁶⁹ FISHER, *supra* note 34, at 22-23.

⁷⁰ *Id.*

different thinking processes, judges often find themselves faced with multiple values that reflect different facets of these theories, which can influence the way courts determine the fairness of copying acts as demonstrated in *Harper* and *Betamax*. This makes a uniform application of any of these theories in the fair use/fair dealing doctrine quite difficult.⁷¹ Furthermore, if a court adopts a certain approach to a particular case, it may apply a different theory for a similar subsequent case. For instance, in *Betamax*, the US Supreme Court found that time-shifting use is widespread behavior that serves the public interest and acknowledging otherwise would mean that there are millions of infringers;⁷² while in *Napster*, the Court of Appeals for the Ninth Circuit found that users who were using the service for space-shifting purposes through the P2P network were engaging in copyright infringements of the plaintiffs' content.⁷³ However, the Ninth Circuit in *Napster* did not follow a previous ruling rendered by the same circuit in *Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc.* (hereinafter *Diamond*).⁷⁴ In *Diamond*, the Ninth Circuit found that the Rio, a portable digital audio device manufactured by Diamond that allows a user to copy music files from a hard disk to the Rio, is considered as fair use under the *Betamax* ruling.⁷⁵ Although both cases share similar

⁷¹ FISHER, *supra* note 34, at 1691.

⁷² *Betamax*, *supra* note 24, at 454. The Supreme Court, commenting on the District Court's decision in *Betamax*, stated that "The District Court's conclusions are buttressed by the fact that to the extent time-shifting expands public access to freely broadcast television programs, it yields societal benefits . . . we acknowledged the public interest in making television broadcasting more available. Concededly, that interest is not unlimited. But it supports an interpretation of the concept of 'fair use' that requires the copyright holder to demonstrate some likelihood of harm before he may condemn a private act of time-shifting as a violation of federal law". The Court also noted the wide access to video recording capable devices as it stated that "[o]ne may search the Copyright Act in vain for any sign that the elected representatives of the millions of people who watch television every day have made it unlawful to copy a program for later viewing at home, or have enacted a flat prohibition against the sale of machines that make such copying possible". At 456.

⁷³ *Napster*, *supra* note 28, at 1019. The Ninth Circuit did not just make a distinction between time-shifting and space-shifting, but it also changed the perception of public broadcast. It is important to note that the Napster service did not distribute the music files to all individuals or that users distributed such content to all people. A user must, first, search for a certain music file, then find a match result, and, finally, connect to that user in order to download the music file, so it is an individual to individual interaction, not public to individual. However, the Ninth Circuit stated that "[w]e conclude that the district court did not err when it refused to apply the 'shifting' analyses of Sony and Diamond. Both Diamond and Sony are inapposite because the methods of shifting in these cases did not also simultaneously involve distribution of the copyrighted material to the general public; the time or space-shifting of copyrighted material exposed the material only to the original user. In Diamond, for example, the copyrighted music was transferred from the user's computer hard drive to the user's portable MP3 player. So too Sony, where 'the majority of VCR purchasers . . . did not distribute taped television broadcasts, but merely enjoyed them at home.' Conversely, it is obvious that once a user lists a copy of music he already owns on the Napster system in order to access the music from another location, the song becomes 'available to millions of other individuals,' not just the original CD owner".

⁷⁴ *Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc.*, 180 F.3d 1072 (9th Cir. 1999).

⁷⁵ *Id.* at 1079. The Ninth Circuit stated that ". . . The Rio merely makes copies in order to render portable, or 'space-shift,' those files that already reside on a user's hard drive . . . Such copying is paradigmatic noncommercial personal use . . .".

contexts, which are time-shifting and space-shifting, the Supreme Court acknowledged the public interest in *Betamax*, while the Ninth Circuit in *Napster* did not.

In order for courts to enforce these theories, they require a legal remedy. To protect authors' rights, the system of copyright is usually based on a mixture of property and liability rules, but the latter has started to become a more common application than the former.⁷⁶ As mentioned, a property is a subject of copyright, not the entitlement itself, and as a result of this connection an author is granted certain rights that govern how a property is administered, which are the bundle of rights. Among these given rights is the right to exclude, which is one of the most exercised rights in the system of property rules.⁷⁷ In cases of copyright, property rules take the form of court injunctions and criminal sanctions, including imprisonment, in the event there is direct infringement. However, with the increasing reliance on liability rules in copyright, authors are currently relying on collecting royalties from the use of their works.⁷⁸ Liability rules follow a system of compensating the damages suffered by the author in the cases of copyright infringement.⁷⁹

On the other hand, defendants mainly rely on the fair use/fair dealing doctrine in order to escape facing a property or liability rule.⁸⁰ However, there are certain cases where a fair use/fair dealing defense does nothing to support the defendant's claim. For instance, in 2011, the First Circuit of the US Court of Appeals found Joel Tenenbaum liable for paying 675,000 USD, adjusted from 67,500 USD, in downloading and distributing song files by using P2P networks.⁸¹ In 2013, The European Court of Human Rights (ECHR) upheld a decision rendered by the Svea Court of Appeal in Sweden that sentenced two of the founders of The Pirate Bay (hereinafter TPB) with ten months to the first applicant and eight months to the second one,

⁷⁶ DANIEL CRANE, INTELLECTUAL LIABILITY, *Tex. L. Rev.* 88, 2, 259 (2009).

⁷⁷ *Id.* 253-254.

⁷⁸ *Id.* 254.

⁷⁹ *Id.* See William Fisher, *CopyrightX, Lecture 12.2, Remedies: Damages*, 20:56-22:27 available at <https://www.youtube.com/watch?v=8fv5FF0zugU>. The four theories of copyright aim to provide creators a way to recover from unpermitted uses of their content through a system of indemnities. The Lockean and personality theories aim to provide proper incentive to creators. Thus, the absence of such an incentive will most likely entail a compensation. The utilitarian and social planning theories require a system of penalties in order to make users who obtained unpermitted access to protected works indemnify copyright owners. Therefore, creators will keep making new content as they are guaranteed that they will get compensated whenever there is an act of infringement.

⁸⁰ Users can also rely on the first sale doctrine, which allows the first purchaser of a protected content to sell it to another person. However, defenses of fair use/dealing have become non-effective against claims of willful or direct infringement.

⁸¹ *Sony BMG Music Entm't v. Tenenbaum*, No. 12-2146 (1st Cir. 2013).

lowered from one year for both defendants.⁸² In addition, the ECHR upheld the Court of Appeal decision in finding the defendants jointly liable for paying approximately 5 million EUR, adjusted from 3.3 million EUR.⁸³ As these cases illustrate, the fair use/fair dealing defense compared to the gravity of property and liability rules makes the balancing process quite difficult.

When all of these complexities - theories of copyright, fair use/fair dealing, property and liability rules - are combined together they reflect the everlasting tension between public and private interests.⁸⁴ These conflicts of interest should not be surprising as the purpose of copyright is to regulate the relations between authors and society.⁸⁵ Private law grants private rights resulting in a certain amount of public good in protecting a society's private interests.⁸⁶ On the other hand, public law provides rights that reflect the general interests of a society, and if a private right harms a public one that serves a common good, then the latter overrules the former.⁸⁷ However, a realist approach suggests that protecting private property is a balance between private exclusive rights and specific public interests,⁸⁸ so for a public interest to outweigh a private one it must be included in an exhaustive list of public rights that are set as exceptions to private exclusive rights.

Thus, from this point of view, such balance works for every kind of property.⁸⁹ However, to strike a balance between an IP and a physical one is not the same.⁹⁰ The difference between the two kinds of property is not because of their nature, whether physical or intellectual, rather, it is due to the different rights attached to each type of property as the margin of rights differ between the two.⁹¹ For instance, a landowner has a very limited margin of rights whereby a state can intervene when there is a critical situation, such as the taking of land to build a public utility. On the other hand, a copyright owner has a much larger margin of rights compared to a

⁸² NEIJ AND SUNDE KOLMISOPPI v. SWEDEN 40397/12, 19/02/2013, available at <https://hudoc.echr.coe.int/eng#%7B%22itemid%22:%5B%22001-117513%22%5D%7D>. TPB is a form of P2P file sharing service.

⁸³ *Id.*

⁸⁴ LAWRENCE LESSIG, CODE VERSION 2.0, 180-181 (2006). See PETER JASZI, TOWARD A THEORY OF COPYRIGHT: THE METAMORPHOSES OF "AUTHORSHIP", Duke Law Journal 455-502, 463-464 (1991). Available at <https://scholarship.law.duke.edu/dlj/vol40/iss2/8>.

⁸⁵ *Id.* at 180.

⁸⁶ *Id.*

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ *Id.*

landowner because an intellectual contribution is difficult to restrict once it goes public.⁹² When a set of rights are attached to real property, such as a farm, private law protects the owner's incentive and possession, while copyright protects the authors' incentive only as long as the copying or the use of the content does not degrade the original condition of the work or affect its ownership or remove the content from its owner's possession.⁹³ For instance, Andrzej Sapkowski, a Polish author, was offered a percentage of the profits from the adaptation of his novel into a video game. Instead, he demanded that the video game company pay him a flat fee for using his work.⁹⁴ In this example, the author did not trade his ownership or possession of the novel, rather, he sold his incentive right to receive a regular income from this particular use of his work. In this way, the novel would remain his own original, and personally owned intellectual creation. The fact that the video game company took his novel and made substantial additions to it would not change these attributes. Therefore, the relation between public and private interests' rests on determining the extent of fairness in either enforcing an author's right or legitimizing a user's copying act.

Imposing excessive restricting measures over users' access to copyrighted works will only slow the process of creation. This is the reason for Lawrence Lessig arguing that the nature of IP makes the use of restrictive measures, such as controlling copies and of accessing the protected content are against the copyright's purpose, which is to "promote the progress of science and useful arts."⁹⁵ On the contrary, such protective measures may hinder that progress as they increase the restrictions over potential creators in accessing other protected content,⁹⁶ which in turn will diminish the availability of new works to the public. Moreover, such measures

⁹² *Id.* at 182. Thomas Jefferson has a notable statement regarding intellectual inventions: "If nature has made any one thing less susceptible than all others of exclusive property, it is the action of the thinking power called an idea, which an individual may exclusively possess as long as he keeps it to himself; but the moment it is divulged, it forces itself into the possession of every one, and the receiver cannot dispossess himself of it. Its peculiar character, too, is that no one possesses the less, because every other possess the whole of it. He who receives an idea from me, receives instruction himself without lessening mine; as he who lites his taper at mine, receives light without darkening me. That ideas should freely spread from one to another over the globe, for the moral and mutual instruction of man, and improvement of his condition, seems to have been peculiarly and benevolently designed by nature, when she made them, like fire, expansible over all space, without lessening their density at any point, and like the air in which we breathe, move, and have our physical being, incapable of confinement or exclusive appropriation. Inventions then cannot, in nature, be a subject of property".

⁹³ *Id.* at 183.

⁹⁴ Charlie Hall, *The Witcher author Andrzej Sapkowski demands more than \$16M in royalties, available at <https://www.polygon.com/2018/10/2/17927916/the-witcher-author-andrzej-sapkowski-royalties-cd-projekt-red>*. Realizing his mistake when he sold his rights, he threatened to file a lawsuit for demanding his royalties.

⁹⁵ LESSIG, *supra* note 84, at 184. This is the Copyright Clause of the US Constitution, and there are other regulations that include similar wording that stresses on the importance of promoting and sharing knowledge and information.

⁹⁶ *Id.*

contribute very little to the authors' incentive as these measures do not increase their options of revenues, rather, they limit the dissemination and hence the promotion of their creations. Due to the increasing spread of the private law concept of private property, however, the fundamental aspects of copyright are getting waived through a customized copyright. Such customization is apparent in the form of contracts, licenses, and clickwrap agreements.⁹⁷ The most important aspect of these is fair use, which is a principle that can serve not only the interest of users, but also the authors as they rely on the use of previous works made by other creators.⁹⁸

In addition, the excessive usage of terms like "piracy," "stealing," and "theft" in the area of software copyright causes even more confusion as the issue transforms from being an IP one to that of "real property."⁹⁹ To demonstrate, the right to exclude, expel, and punish grants the landowner the right to use force in facing trespassers, which can be translated, in the case of software copyright, in allowing the copyright owners to destroy the infringers' computers.¹⁰⁰

Each person is a user before anything else. There is no content entirely created by authors,¹⁰¹ and excessive protection measures may hinder their creativity as all authors use the work of others to create their own content. Thus, imposing more restrictions will lead to discouraging authors to create as they will face difficulties in accessing other creators' content.¹⁰² Therefore, increasing the protection of copyright can benefit authors in certain instances, while ensuring the proper promotion and dissemination of their intellectual contributions can help them in all instances. The reason is because all authors start as users until they finish their work; authors do not spend all of their time creating because in order to invent one would need to use first. Therefore, every creator is and remains a user.

Balancing between conflicted interests is a complicated task, and it becomes even more complicated when the purpose of copyright gets lost amidst such conflicts. In a recent development in Europe in this regard, the European parliament passed certain amendments to

⁹⁷ *Id.* at 187. Clickwrap is one of the agreement forms that accompanied the advance tools of technology. The clickwrap is basically is a prompt or message that appears to consumers while using a software that asks them for acceptance of the applied policy on the content in order to open it.

⁹⁸ *Id.* at 185.

⁹⁹ FISHER, *supra* note 33, at 134.

¹⁰⁰ *Id.* at 136-137 and 151.

¹⁰¹ LEVAL, *supra* note 10, at 1109. See GORDON, *supra* note 47, at 1556.

¹⁰² STEPHEN MCJOHN, FAIR USE OF COPYRIGHTED SOFTWARE, 28 Rutgers L.J. 593, 602 (1997).

the EU Copyright Directive.¹⁰³ The most important aspect of these amendments is the secondary liability of service providers. This means that all intermediary services are also responsible for copyrighted content on their websites, which is known as secondary liability. This sort of liability can be found in *Napster* as the Court found the intermediary service, Napster, engaged in a secondary liability of copyright infringement. The problem, however, is that users are dragged into a “corporate war” between service providers and publishers; users are encouraged by service providers to protest the amendments. On the other hand, publishers are also urging creators to support the amendments made to the directive.

This financial dispute between service providers and publishers as copyright owners is not a conflict that users or creators should be involved in.¹⁰⁴ Not all authors, service providers, publishers or users are financially equal as many of them are susceptible to severe economic situations, especially if a new law sets new restrictions on them. It is possible to claim that the problem is that authors do not have enough protection as publishers tend to maximize their profits at the expense of the author.¹⁰⁵ While this is true, granting more protections to authors will only lead to further maximization of publishers’ profits as they are vested in the authors’ copyright. In addition, users will be affected by the increased protection in the further tightening of the control over content dissemination. Moreover, the more these protections are strengthened, the less effective fair use/fair dealing becomes as a defense against copyright infringement claims. In this way, the balancing process of the doctrine of fair use/fair dealing is hindered. It is for this reason that maintaining the purpose of copyright through preserving fair use/fair dealing protection is important for users and authors alike.¹⁰⁶

In conclusion, the tension between public and private interests is to remain within copyright system. However, it does not mean that there are no tools that can keep this tension intact and also maintain the balance between public and private interests. The next chapter will discuss the principle of fair use/dealing and its role in maintaining the balance between public and private interests.

¹⁰³ Matt Reynolds, *What is Article 13? The EU's divisive new copyright plan explained*, available at <https://www.wired.co.uk/article/what-is-article-13-article-11-european-directive-on-copyright-explained-meme-ban>.

¹⁰⁴ JESSICA LITMAN, WHAT WE DON'T SEE WHEN WE SEE COPYRIGHT AS PROPERTY, 77 CAMBRIDGE L.J., 4-5 (2018).

¹⁰⁵ *Id.*

¹⁰⁶ LESSIG, *supra* note 84, at 184-185.

III. Fairness in Software Copyright

Many jurisdictions are drawn to the US model of fair use.¹⁰⁷ The US concerted efforts to mold treaties that govern IP rights to conform to its own system reflects the intention to export its IP system, or at least a quasi-US IP system, to the highest possible number of countries. For instance, treaties like the Anti-Counterfeiting Trade Agreement (ACTA) and Trans-Pacific Partnership (TPP) that force the signatories to ratify an IP system that matches or closely resembles the US one makes the idea of exporting the US fair use model to other states a valid one.¹⁰⁸ Although the fate of these treaties, especially ACTA, is not yet certain, the US may succeed in pushing these treaties to become official or opt to craft a new treaty.¹⁰⁹ This chapter discusses the influence of the US fair use model in the Egyptian copyright systems and other jurisdictions. In addition, the chapter presents the US fair use model and its application in lawsuits related to software copyright along with an evaluation to this particular model. Afterwards, the chapter presents the principle of fair dealing and enumerated permissible uses (hereinafter EPU) in their relevant caselaw. Finally, the chapter ends with a critique of the principle of fair use/dealing and the reasons to reconsider the existing factors of the fair use/dealing tests.

A. The Influence of the US Fair Use Model on Different Jurisdictions including the Egyptian Context

Countries such as Sri Lanka, the Philippines, Singapore, South Korea, and Taiwan have applied the US fair use model or similar legal concepts in their own countries.¹¹⁰ Even countries that adopt their own fair dealing provisions have been influenced by the US model of fair use, such as Canada.¹¹¹ Canada has not had many copyright lawsuits.¹¹² However, in 2012, the Canadian Supreme Court rendered five decisions on five copyright cases in a single day, and a few of

¹⁰⁷ PAMELA SAMUELSON ET. AL., IS THE U.S. FAIR USE DOCTRINE COMPATIBLE WITH BERNE AND TRIPS OBLIGATIONS? 13 (2018). The article argues that the US model of fair use is consistent with the TRIPS three-step-test. The authors demonstrate this argument by showing, among other things, a non-exhaustive list of countries that adopted similar fair use provisions. Thus, reflecting the influence of the US fair use model over other jurisdictions.

¹⁰⁸ See William Fisher, *CopyrightX: Lecture 1.4, The Foundations of Copyright Law: Multilateral Treaties*, 33:38-35:21 available at <https://www.youtube.com/watch?v=00Bq5n7wYn0>.

¹⁰⁹ William Fisher, *CopyrightX, Lecture 11.3, Supplements to Copyright: Tech Protection Measures*, 7:42-9:28 available at <https://www.youtube.com/watch?v=QVe6dCuJ4M0&feature=youtu.be>. It is worth noting that the DMCA could have been a multilateral treaty.

¹¹⁰ SAMUELSON, *supra* note 107.

¹¹¹ GEIST, *supra* note 26, at vii.

¹¹² *Id.* at iii. Stating that the Canadian Supreme Court had just one case related to copyright every few years.

these cases were related to software copyright.¹¹³ Another approach, which is the EPU can be found in many parts of Europe.¹¹⁴ EPU is based on listing certain types of usage for copying protected content without constituting an infringement. Later in this chapter, it will be shown that fair dealing and EPU coexist in certain jurisdictions, such as the UK.

The increasing development of technology and the complexities of the recording and sharing tools make the US fair use doctrine appealing to other states.¹¹⁵ For instance, the recent South African parliament deliberations of integrating fair use provisions into its fair dealing model provides an example of developing countries in Africa who have adopted the US fair use doctrine.¹¹⁶ In addition, in Egypt, although there are exceptions in the Egyptian IP law of 2002 that are applied on the author's rights in favor of the users, in Article 171 the law does not say anything explicit regarding the principle of fair use.¹¹⁷ In terms of software copyright, Article 171 only addresses author's restrictions on copying acts of all or a substantial part of a database or computer program subject to copyright, and that any copying or adaptation of the program for the purpose of archiving or recovering a lost original copy must be followed by the author's consent.¹¹⁸ There was an attempt by the Library of Alexandria, however, to push Article 171 towards the context of fair use, but in terms of acts of software copying the Library prohibited them under its internal policy, not the Egyptian IP law.¹¹⁹ Therefore, there is no legal claim of fair use/dealing under the Egyptian IP law.

¹¹³ *Id.*

¹¹⁴ Fisher, *supra* note 58, at 5:55-6:35.

¹¹⁵ SAMUELSON, *supra* note 107, at 14.

¹¹⁶ Intellectual Property Watch, *Defending Fair Use In South Africa*, available at <http://www.ip-watch.org/2018/12/04/defending-fair-use-south-africa/>.

¹¹⁷ WIPO, *Law No. 82 of 2002 on the Protection of Intellectual Property Rights*, available at <https://wipolex.wipo.int/en/legislation/details/1301>. Article 171 states that "[w]ithout prejudice to the moral rights of the author under this Law, the author may not, after the publication of the work, prevent third parties from carrying out any of the following acts: . . .". It only provides a list of certain copying acts that users can make without infringing the author's rights.

¹¹⁸ *Id.* The article states that a user can "[m]ake, with the consent of the legitimate owner of the program, a single copy or an adaptation of a computer program, even if exceeding the extent necessary for the use of the program inasmuch as it remains within the limits of the purpose for which consent was initially granted, for archiving purposes or to replace a lost, destroyed or invalid original copy. In either case, the original or adapted copy shall be destroyed upon expiration of the property title. The Regulations shall determine the terms and conditions of adaptation from the program".

¹¹⁹ The Library of Alexandria, *Copyright Policies*, available at <https://www.bibalex.org/Libraries/Presentation/Static/15680.aspx>. "Fair Use (Article 171 of the Egyptian Law of Intellectual Property 82 of 2002) is a complex doctrine meant to facilitate certain valuable social and educational purposes. Fair use allows parts of a copyrighted work to be used without requesting permission and without violating, or infringing, the copyright. However, only a limited portion of a work is allowed to be copied. According to an article of the Fair Use Doctrine, the copyright holder cannot forbid anyone from doing any of the following . . .". Although there are no articles in the Egyptian IP law that refer to fair use, rather they include

However, the lack of fair use/dealing claims in the Egyptian IP law has not prevented scholars from addressing such claims in their writings. In general, there is a growing scholarly interest to analyze the situation of accessing knowledge and information in Egypt.¹²⁰ This interest is reflected in increasing restrictions over protected content against unauthorized usage. These new policy considerations are required to prevent the complex system of IP protection from hindering the promotion and innovation of creative content and harming the public interest in accessing knowledge and information.¹²¹ Furthermore, the complex issue of protecting digital content is also addressed within the Egyptian context in terms of balancing between private monopolies and social welfare.¹²² In addition, the role of the Egyptian software industry in helping with the access to knowledge and information has been analyzed.¹²³ In particular, there has been a suggestion to implement the “broader” US model of fair use in the Egyptian context by replacing the narrower conditions provided in the Egyptian copyright rules with it.¹²⁴ However, there are no existing studies within the academic field in Egypt to date that address the issues of fair use/dealing in its respective jurisdictions and to formulate possible remedies to such disadvantages as a means to make this foreign principle more likely to be applied in the Egyptian copyright system.

In spite of its influence, the US model of fair use does not come without its own problems. Although the US doctrine of fair use is one of the oldest models, and still applicable in balancing between the interests of copyright owners and users compared to other ones, its inconsistency and unpredictability reduce the advantage of the doctrine in cases of software copying. For this reason, knowing how fair use is applied, how it has been adopted in other jurisdictions, and how similar provisions fare in resolving software copyright issues is useful to properly address the fairness of software copying.

certain permissible uses, the Library of Alexandria still included the principle of fair use in its copyright policy, minus the factors. It is worth noting that the Library of Alexandria utilized in its language “the fair use doctrine”, which reflects the extent of influence created by the US model of fair use.

¹²⁰ NAGLA RIZK & LEA SHAVER (eds.), ACCESS TO KNOWLEDGE IN EGYPT NEW RESEARCH ON INTELLECTUAL PROPERTY, INNOVATION AND DEVELOPMENT (2010).

¹²¹ *Id.* at 1-2.

¹²² *Id.* at 96-97.

¹²³ *Id.* at 134- 135.

¹²⁴ JEREMY DE BEER, ACCESS TO KNOWLEDGE IN AFRICA: THE ROLE OF COPYRIGHT, 41-42 (2010). In a study conducted by Hassan Al-Badrawy and Hossam Al-Saghir called “Copyright in the Egyptian law: an analysis from a development perspective”, there were several suggestions made to improve the Egyptian copyright rules. Among these suggestions was adopting the US model of fair use.

B. The US Model of Fair Use

Fair use, under the US model, is a legal privilege granted to users that allow them to make lawful copying acts under certain circumstances; this means that a copyright owner has no right to prevent the fair user from copying, and that the owner has a legal duty to allow the user to do so. The current method of determining the fairness of the copying act entails four factors: the purpose and character of the use, the nature of the copyrighted work, the quantity and importance of the used material, and the effect of the use upon the potential market or value of the copyrighted work.¹²⁵

These four factors were established in *Folsom* and are still followed by the US courts in determining fair use claims in copyright cases. While they are regularly applied, the four factors test is still criticized due to its inability to cover all acts of copying that are made through complex technological means as it partly focuses on the economic value of the use.¹²⁶ For instance, the purpose of the use examines whether it is intended for commercial purposes. In addition, the flexibility of fair use is a double-edged sword; it can be applied to many complex cases of copyright, but its flexibility can also lead to multiple interpretations of the doctrine for the same type of disputes, which can result in contradictory judgments among court rulings.¹²⁷

1. Purpose and Character

The first of the four factors in determining the fairness of the copying act is purpose and character. It is associated with commercial and transformative uses.¹²⁸ One of the most important commercial use examples is the *Betamax* case. The Supreme Court considered the act of “time-shifting,” taping a live broadcast for later viewing as a noncommercial act.¹²⁹ In

¹²⁵ LEVAL, *supra* note 10, at 1111-1124.

¹²⁶ MADISON, *supra* note 21, at 1587. Madison states that the four factors do not provide clear separation between “fair and unfair uses” when it comes to copying acts of software content. He argues that separating between fair and unfair uses of such acts will be difficult by only following “the language of the statute”, which explains the reason courts rely on theory in interpreting fair use, which is something he argues against as he sees that courts should constrain fair use instead of theorizing it. See PATTERSON, *supra* note 4.

¹²⁷ STEPHEN MCJOHN, FAIR USE AND PRIVATIZATION IN COPYRIGHT, 35 San Diego L. Rev. 61, 62 (1998). Although Mcjohn sees that flexibility will serve copyright best, he does concur that there are indeterminacies in fair use cases as they cause “a disproportionate share of reversals and divided courts”. See STEPHEN THAU, COPYRIGHT, PRIVACY, AND FAIR USE, 24 Hofstra L. Rev. 179, 221 (1995). Similarly, Thau agrees that the flexibility of the fair use analysis causes inconsistencies in copyright cases, but he argues that such flexibility is, despite the inconsistencies, the best option in the context of copyright.

¹²⁸ SONG, *supra* note 14, at 456-458.

¹²⁹ *Betamax*, *supra* note 24, at 449. In analyzing the first factor, The Supreme Court stated that “[i]f the *Betamax* were used to make copies for a commercial or profitmaking purpose, such use would presumptively be unfair.

addition to *Betamax*, in *Campbell v. Acuff-Rose Music* (hereinafter *Campbell*),¹³⁰ the defendant created a song based on one by Roy Orbison's "Pretty Woman" with the intent of making a parody of it. The Supreme Court ruled that an act of parody, even if it is for commercial use, can be constituted as fair use. The Court of Appeals for the Sixth Circuit initially decided that the commercial nature of the copying act made it unfair. The Supreme Court, in overturning the decision stated that a use which is made for educational purpose neither makes it fair nor a commercial use renders it unfair.¹³¹

The courts must consider all of the factors in a case, but the statute does not determine whether one factor weighs more than another.¹³² In addition, there are no rules that oblige courts to restrict themselves to using the four steps of fair use they can consider other aspects of the law as well.¹³³ The transformative use shows some sort of creation in the copying act, not just copying the content without making any changes to it.¹³⁴ In *Campbell*, the transformative factor was the main reason for the Supreme Court's consideration that parody is fair use as it shows an act of transforming the original content's character into something else, which is parody in this case.¹³⁵

2. Nature of the Copyrighted Work

The second factor in determining the fairness of the copying act is the nature of the copyrighted work which is associated with the status of the protected content – whether the content is

The contrary presumption is appropriate here, however, because the District Court's findings plainly establish that time-shifting for private home use must be characterized as a noncommercial, nonprofit activity".

¹³⁰ *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569 (1994).

¹³¹ *Id.* at 570. In the first factor, the Supreme Court stated that "[t]he Court of Appeals properly assumed that 2 Live Crew's song contains parody commenting on and criticizing the original work, but erred in giving virtually dispositive weight to the commercial nature of that parody by way of a presumption, . . .". In addition, the Court further added that ". . . the mere fact that a use is educational and not for profit does not insulate it from a finding of infringement, any more than the commercial character of a use bars a finding of fairness". At 584.

¹³² THAU, *supra* note 127, at 185. However, and as will be demonstrated, there are certain cases where one of the factors was definitive in their outcome.

¹³³ *Id.*

¹³⁴ SONG, *supra* note 14, at 456-458.

¹³⁵ *Campbell*, *supra* note 130, at 594. The Court concluded that "[i]t was error for the Court of Appeals to conclude that the commercial nature of 2 Live Crew's parody of 'Oh, Pretty Woman' rendered it presumptively unfair. No such evidentiary presumption is available to address either the first factor, the character and purpose of the use, or the fourth, market harm, in determining whether a transformative use, such as parody, is a fair one". In addition, the Court mentioned "[t]he more transformative the new work, the less will be the significance of other factors, like commercialism, that may weigh against a finding of fair use". At 569. This way of stressing on the importance of the transformative aspect of a use will be seen again in this chapter.

“factual or fictional” and if it is “published or unpublished.”¹³⁶ In the case of published content, courts look to the level of creativity reflected in the content itself. For instance, a work of fantasy involves more creativity compared to a factual work. This makes fair use more likely to be considered in the latter rather than the former as the presentation of facts tends to have less protection compared to other non-fictional works.¹³⁷ This step is similar to what is called the doctrine of originality as it looks for a certain level of creativity that can be attributed to the author. The resemblance lies in the idea of measuring a specific degree of originality. As to unpublished content, courts generally do not exclude a finding of fair use in the copying acts of unpublished content.¹³⁸ However, in *Harper*, the US Supreme Court found that the act of distributing excerpts of an unpublished memoir was indeed unfair.¹³⁹

3. Quantity and Importance of the Used Material

The third factor in determining the fairness of the copying act is the quantity and importance of the used material based on the amount that is copied and whether the copied portion, regardless of its size, is significant relative to the protected content.¹⁴⁰ In *Betamax*, the Supreme Court considered that simple reproduction of live broadcasts through videotapes was not necessarily an infringement.¹⁴¹ On the other hand, in *Napster*, the US Court of Appeals for the Ninth Circuit found that users who reproduce music files through the sharing network are guilty of infringement.¹⁴² In another notable case, *Harper*, the Supreme Court reversed the decision of the Second Circuit due to its following a quantitative approach in ruling that such short excerpts should not be considered as substantial parts of the whole work.¹⁴³

¹³⁶ SONG, *supra* note 14, at 456-458. If a content is published, courts do not pause to look at the status of its publicity as it is already published, so they move directly at the step of whether the content is factual or fictional. On the other hand, unpublished works prompt courts to see whether the status of the work as unpublished can result against the finding of fair use.

¹³⁷ *Id.*

¹³⁸ *Id.* Section 107 of the Limitations on Exclusive Rights: Fair Use of the US Copyright Act states that “[t]he fact that a work is unpublished shall not itself bar a finding of fair use if such finding is made upon consideration of all the above factors”. Pub. L. 102-492, Oct. 24, 1992, 106 Stat. 3145.

¹³⁹ See *Harper*, *supra* note 48 and accompanied text. It is important to note that in *Harper* the copied excerpts were not only unpublished, but they were also factual, which should have received less protection.

¹⁴⁰ SONG, *supra* note 14, at 456-458.

¹⁴¹ *Betamax*, *supra* note 24, at 450. The Court stated that “. . . the fact that the entire work is reproduced . . . does not have its ordinary effect of militating against a finding of fair use”.

¹⁴² *Napster*, *supra* note 28, at 1014. The Ninth Circuit determined “. . . that plaintiffs have shown that Napster users infringe at least two of the copyright holders’ exclusive rights: the rights of reproduction . . . and distribution, . . .”.

¹⁴³ See *Harper*, *supra* note 48, at 565. The Supreme Court stated that “. . . the Act directs us to examine the amount and substantiality of the portion used in relation to the copyrighted work as a whole. In absolute terms,

4. Effect of the Use on the Market

The fourth factor in determining the fairness of the copying act is the effect of the use upon the potential market or value of the copyrighted work. It aims to provide the authors financial revenue from their work so that it can serve as an incentive for them to create more work by guaranteeing that the use will not harm their financial status.¹⁴⁴ However, in *Campbell*, the Supreme Court did not find that an act of parody, even if it would affect the original content, was not fair use under this factor.¹⁴⁵

In *Campbell*, the Court's rationale was that even if a work of parody resulted in decreasing demand for the original content, it is not considered a "harm" under the US Copyright Act.¹⁴⁶ On the other hand, in *Napster*, the Ninth Circuit affirmed the District Court's finding concerning the download of music files by Napster and the negative effects caused by such activity on the plaintiffs' financial status. This finding was based on the decrease of music file sales among the plaintiffs' most important demography, college students, and disrupting the plaintiffs' plans to enter the digital download market.¹⁴⁷

In the next section, the fair use test will be further discussed in order to see how it fares in the context of software copying.

the words actually quoted were an insubstantial portion of 'A Time to Heal.' The District Court, however, found that '[T]he Nation took what was essentially the heart of the book.' . . . We believe the Court of Appeals erred in overruling the District Judge's evaluation of the qualitative nature of the taking. See, e. g., *Roy Export Co. Establishment v. Columbia Broadcasting System, Inc.*, 503 F. Supp., at 1145 (taking of 55 seconds out of 1 hour and 29-minute film deemed qualitatively substantial)".

¹⁴⁴ SONG, *supra* note 14, at 462.

¹⁴⁵ See *Campbell*, *supra* note 130 at 591. The Supreme Court stated that "[n]o 'presumption' or inference of market harm that might find support in Sony is applicable to a case involving something beyond mere duplication for commercial purposes. The cognizable harm is market substitution, not any harm from criticism. As to parody pure and simple, it is unlikely that the work will act as a substitute for the original, since the two works usually serve different market functions".

¹⁴⁶ *Id.* at 23 at 591-592. The Court further mentioned that "[w]e do not, of course, suggest that a parody may not harm the market at all, but when a lethal parody, like a scathing theater review, kills demand for the original, it does not produce a harm cognizable under the Copyright Act. Because 'parody may quite legitimately aim at garroting the original, destroying it commercially as well as artistically,' . . ., the role of the courts is to distinguish between '[b]iting criticism [that merely] suppresses demand [and] copyright infringement, which usurps it'".

¹⁴⁷ See *Napster*, *supra* note 28, at 1016. In addressing the fourth factor, the Ninth Circuit of the Court of Appeals stated that ". . . the district court concluded that Napster harms the market in at least two ways: it reduces audio CD sales among college students and it raises barriers to plaintiffs' entry into the market for the digital downloading of music". The Court stated that "[w]e, therefore, conclude that the district court made sound findings related to Napster's deleterious effect on the present and future digital download market. Moreover, lack of harm to an established market cannot deprive the copyright holder of the right to develop alternative markets for the works". At 1017.

a. Fair Use in Action

One of the important cases in the field of software copyright is *Kelly v. Arriba Soft Corp.* (hereinafter *Kelly*).¹⁴⁸ In this case, the defendant, Arriba Soft, allowed the visibility of thumbnails in its search results by the search engine. The plaintiff, Kelly, a photographer, filed a lawsuit against Arriba Soft for showing some of her works in the form of thumbnails and full-sized images of Kelly's photography that she sells to different publications.¹⁴⁹

The Ninth Circuit Court considered that the search results of the small-sized pictures as fair use under the first factor, purpose and character. The main element in determining the fairness of showing the thumbnails is the transformative use resulting from it.¹⁵⁰ Transformative use is reflected in the lower resolution of the thumbnails, and that they differed significantly from the original ones.¹⁵¹ One notices here that the transformation element does not mean that the use provides a more creative copy, rather, it means that the use resulted in a substantial change to the original content, regardless of the quality. Furthermore, the Ninth Circuit found that the thumbnails aimed to facilitate access to these images as a matter of convenience, not to provide the original content to users.¹⁵²

Under the second factor, the nature of the copyrighted work, the Ninth Circuit found that the thumbnails were fair use. The Ninth Circuit did acknowledge the creativity behind the photographs, but the fact that these photos were already published on Kelly's website made this factor not so decisive in the plaintiff's favor.¹⁵³ In terms of the third factor, the amount and

¹⁴⁸ *Kelly v. Arriba Soft Corporation*, 280 F.3d 934 (9th Cir. 2002) withdrawn, re-filed at 336 F.3d 811 (9th Cir. 2003).

¹⁴⁹ SONG, *supra* note 14, at 463-464.

¹⁵⁰ See *Kelly*, *supra* note 148 at 818. In the first factor, purpose and character of the use, the Ninth Circuit of the Court of Appeals found that "[t]he more transformative the new work, the less important the other factors, including commercialism, become", especially that the court determined that "the commercial nature of the use weighs only slightly against a finding of fair use".

¹⁵¹ *Id.* at 819. In continuation of the Ninth Circuit's finding concerning the first factor, it stated that "[t]his case involves more than merely a retransmission of Kelly's images in a different medium. Arriba's use of the images serves a different function than Kelly's use-improving access to information on the internet versus artistic expression. Furthermore, it would be unlikely that anyone would use Arriba's thumbnails for illustrative or aesthetic purposes because enlarging them sacrifices their clarity. Because Arriba's use is not superseding Kelly's use but, rather, has created a different purpose for the images, Arriba's use is transformative".

¹⁵² *Id.* at 820. The Ninth Circuit further added that "Arriba's use of Kelly's images promotes the goals of the Copyright Act and the fair use exception. The thumbnails do not stifle artistic creativity because they are not used for illustrative or artistic purposes and therefore do not supplant the need for the originals. In addition, they benefit the public by enhancing information-gathering techniques on the internet".

¹⁵³ *Id.* In the second factor, the nature of the copyrighted work, the Ninth Circuit stated that "[p]hotographs that are meant to be viewed by the public for informative and aesthetic purposes, such as Kelly's, are generally creative in nature. The fact that a work is published or unpublished also is a critical element of its nature.

substantiality of portion used, even though the Ninth Circuit found that the defendant copied the entirety of the protected content, it considered that such a copying act was necessary for Arriba in order for it to give the users the choice to be redirected to the original content.¹⁵⁴ Here, the thumbnails served as a transitional phase for the users to access the photographs. However, the Ninth Circuit did find that this factor weighed neither for nor against either of the parties.

In terms of the fourth factor, the effect of the use upon the potential market or value of the copyrighted work, the Ninth Circuit found that the thumbnails did not cause market damage to the plaintiff. On the contrary, the copying act of the defendant may have helped the plaintiff's financial status as the thumbnails allowed the users to find the photographs easier, not to mention the transformative use of the protected content.¹⁵⁵ The Ninth Circuit, however, rejected the fair use claim for the full-sized images shown in the search results. Thus, the Ninth Circuit considered the use of thumbnails as fair, but it rejected the fair use claim in the use of the full-sized images that appeared in search results.

Another important case in the field of software copyright is *The Authors Guild Inc., et al. v. Google, Inc.* (hereinafter *Google Books*) which took more than a decade to completely resolve.¹⁵⁶ The case is related to the project of Google Books which aims to provide a digital library comprised of a huge number of scanned books.¹⁵⁷ The Court of Appeals for the Second Circuit considered Google's copying act as a matter of public interest.¹⁵⁸ The decisive factors

Published works are more likely to qualify as fair use because the first appearance of the artist's expression has already occurred. Kelly's images appeared on the internet before Arriba used them in its search image. When considering both of these elements, we find that this factor weighs only slightly in favor of Kelly".

¹⁵⁴ *Id.* at 821. In the third factor, amount and substantiality of portion used, the Ninth Circuit determined that it ". . . neither weighs for nor against either party because, although Arriba did copy each of Kelly's images as a whole, it was reasonable to do so in light of Arriba's use of the images. It was necessary for Arriba to copy the entire image to allow users to recognize the image and decide whether to pursue more information about the image or the originating web site. If Arriba only copied part of the image, it would be more difficult to identify it, thereby reducing the usefulness of the visual search engine".

¹⁵⁵ *Id.* As to the fourth and final factor, effect of the use upon the potential market for or value of the copyrighted work, the Ninth Circuit stated that "[a] transformative work is less likely to have an adverse impact on the market of the original than a work that merely supersedes the copyrighted work". The Court further added that "Arriba's use of Kelly's images in its thumbnails does not harm the market for Kelly's images or the value of his images. By showing the thumbnails on its results page when users entered terms related to Kelly's images, the search engine would guide users to Kelly's web site rather than away from it".

¹⁵⁶ *Authors Guild v. Google, Inc.*, No. 13-4829 (2d Cir. 2015).

¹⁵⁷ Andrea Peterson, *Google Books just won a decade-long copyright fight, available at* https://www.washingtonpost.com/news/the-switch/wp/2016/04/18/google-books-just-won-a-decade-long-copyright-fight/?noredirect=on&utm_term=.ecc652a1a900.

¹⁵⁸ *Google Books, supra* note 156. The Second Circuit stated that "Google's making of a digital copy to provide a search function is a transformative use, which augments public knowledge by making available information

in *Google Books* were the first – purpose and character – and the fourth – the effect of the use upon the potential market or value of the copyrighted work.¹⁵⁹ By creating a digital library that allows users to search for texts, the Second Circuit found the copying act of Google in digitizing the books immensely transformative.¹⁶⁰ The high transformative value in this case eclipsed the element of Google’s commercial use.¹⁶¹ Although the Second Circuit found under the fourth factor – the effect of the use upon the potential market or value of the copyrighted work – that “snippet view”¹⁶² may result in a financial loss to the authors, it considered market damage claims as presumptive and not based on real evidence.¹⁶³ In addition, there are scanned texts that contained materials not subject to copyright, such as historical facts, so market damage

about Plaintiffs’ books without providing the public with a substantial substitute for matter protected by the Plaintiffs’ copyright interests in the original works or derivatives of them”.

¹⁵⁹ *Id.* Similar to *Kelly*, the Second Circuit contended, quoting another decision, that “. . . as the Supreme Court has recognized, Congress could not have intended a rule that commercial uses are presumptively unfair. Instead, the more transformative the new work, the less will be the significance of other factors, like commercialism, that may weigh against a finding of fair use”. Even when addressing the second and third factors, the Second Circuit emphasized on the transformative aspect of Google Books. In the second factor, the Second Circuit stated that “[w]hile the ‘transformative purpose’ inquiry discussed above is conventionally treated as a part of first factor analysis, it inevitably involves the second factor as well. One cannot assess whether the copying work has an objective that differs from the original without considering both works, and their respective objectives”. It further added that “. . . the second factor favors fair use not because Plaintiffs’ works are factual, but because the secondary use transformatively provides valuable information about the original, rather than replicating protected expression in a manner that provides a meaningful substitute for the original”. As to the third factor, the Second Circuit determined that “not only is the copying of the totality of the original reasonably appropriate to Google’s transformative purpose, it is literally necessary to achieve that purpose. If Google copied less than the totality of the originals, its search function could not advise searchers reliably whether their searched term appears in a book (or how many times)”.

¹⁶⁰ *Id.* Concerning the transformative aspect, the Second Circuit stated that “[w]e have no difficulty concluding that Google’s making of a digital copy of Plaintiffs’ books for the purpose of enabling a search for identification of books containing a term of interest to the searcher involves a highly transformative purpose, in the sense intended by Campbell”. See Andrew Baer, *Google Books Case Transforms the Fair Use Standard*, available at <http://www.baercrossey.com/1723/google-books-case-transforms-the-fair-use-standard>.

¹⁶¹ *Id.* The Second Circuit acknowledged that “[w]hile we recognize that in some circumstances, a commercial motivation on the part of the secondary user will weigh against her, especially, as the Supreme Court suggested, when a persuasive transformative purpose is lacking, . . ., we see no reason in this case why Google’s overall profit motivation should prevail as a reason for denying fair use over its highly convincing transformative purpose, together with the absence of significant substitutive competition, as reasons for granting fair use”.

¹⁶² Snippet view means viewing small parts of texts.

¹⁶³ *Google Books*, *supra* note 156. The Second Circuit affirmed that “[w]e recognize that the snippet function can cause some loss of sales. There are surely instances in which a searcher’s need for access to a text will be satisfied by the snippet view, resulting in either the loss of a sale to that searcher, or reduction of demand on libraries for that title, which might have resulted in libraries purchasing additional copies. But the possibility, or even the probability or certainty, of some loss of sales does not suffice to make the copy an effectively competing substitute that would tilt the weighty fourth factor in favor of the rights holder in the original. There must be a meaningful or significant effect ‘upon the potential market for or value of the copyrighted work’”.

would not apply to such uncopyrightable content.¹⁶⁴ Thus, the Second Circuit upheld the defense of fair use in this case.

b. Fair Use Evaluation

Although the US fair use model was established long before the current technological copying tools came into existence, courts have relied on it, and still do, in several difficult cases in contemporary legal history. The *Betamax* case is one of the most important examples in the modern history of fair use as it sheds light on the missing component in the doctrine that could have made it more capable of handling software copying cases.¹⁶⁵

The *Betamax* ruling has echoed in other cases as well. For instance, in *Sega v. Accolade* (hereinafter *Sega*),¹⁶⁶ the US Court of Appeals for the Ninth Circuit considered Accolade's circumvention of Sega's protection measure in its Genesis console as fair use.¹⁶⁷ Accolade's aim was to make their video games playable on the Genesis console, so they bypassed the console's security measure in order to achieve their goal.¹⁶⁸ The Ninth Circuit considered, under the first factor, that Accolade did copy Sega's code in the Genesis console for commercial purpose, but it also used the protected product to study the functionality of Sega's console so that Accolade could make its video games playable on the Genesis.¹⁶⁹ In addition, the Ninth Circuit found no alternate way for Accolade to achieve its objective, so it found Accolade's act as fair use because the commercial aspect was not decisive in this instance.¹⁷⁰ In the second factor, the Ninth Circuit found that it was necessary for Accolade to break the

¹⁶⁴ *Google Books*, *supra* note 156. Moreover, the Second Circuit contended that this "... type of loss of sale . . . will generally occur in relation to interests that are not protected by the copyright. A snippet's capacity to satisfy a searcher's need for access to a copyrighted book will at times be because the snippet conveys a historical fact that the searcher needs to ascertain".

¹⁶⁵ MATTHEW RIMMER, DIGITAL COPYRIGHT AND THE CONSUMER REVOLUTION: HANDS OFF MY IPOD, 62 (2007).

¹⁶⁶ *Sega Enterprises Ltd. vs Accolade, Inc.*, 977 F.2d 1510 (9th Cir. 1992).

¹⁶⁷ *Id.* at 1574. The Court of Appeals for the Ninth Circuit stated that "[w]e conclude that where disassembly is the only way to gain access to the ideas and functional elements embodied in a copyrighted computer program and where there is a legitimate reason for seeking such access, disassembly is a fair use of the copyrighted work". See JULIE AGUILAR, INTELLECTUAL PROPERTY - SEGA ENTERPRISES LTD. V. ACCOLADE, INC.: SETTING THE STANDARD ON SOFTWARE COPYING IN THE COMPUTER SOFTWARE INDUSTRY, 275-276 (1993).

¹⁶⁸ *Id.*

¹⁶⁹ *Id.* at 1522. The Ninth Circuit stated, when analyzing the first factor, that "... although Accolade's ultimate purpose was the release of Genesis-compatible games for sale, its direct purpose in copying Sega's code, and thus its direct use of the copyrighted material, was simply to study the functional requirements for Genesis compatibility so that it could modify existing games and make them usable with the Genesis console".

¹⁷⁰ *Id.* Continuing from the first factor, the Ninth Circuit added that "... no other method of studying those requirements was available to Accolade".

code of Sega's protection measure so that it could learn how the Genesis console operated in order to make its video games playable on the Genesis.¹⁷¹ In the third factor, the Ninth Circuit considered Accolade's taking apart of the entirety of programs that were written by Sega as an unlawful attempt in achieving its objective.¹⁷² However, the Ninth Circuit noted that even if the whole work made by Sega has been modified by Accolade, it does not rule out the finding of fair use.¹⁷³ The fourth factor weighed against Sega.¹⁷⁴ Although the Ninth Circuit found that Sega would encounter a financial loss due to Accolades' act of copying, it noted Sega's attempt at monopolizing the market to make it unachievable for other competitors to promote their creative work.¹⁷⁵ This case further developed *Betamax* achievements in software copyright. However, these court opinions were not always the same. In 1993, in *MAI Systems Corp. v. Peak Computer Inc.*,¹⁷⁶ the Ninth Circuit held that even the temporary copying of a PDF file that is stored in the Random-Access Memory (RAM) is actually a copyright infringement.¹⁷⁷ In this case, the Ninth Circuit disregarded *Sega's* decision where it did not count the functionality of the program as a copyrightable matter. In addition, *Betamax* and *Sega's* accomplishments were increasingly affected by the enactment of the DMCA.¹⁷⁸ The reversal was clear in the *Napster* case.

In *Napster*, the Ninth Circuit found that the Napster service is capable of non-infringing uses,¹⁷⁹ despite copying the entirety of music files, but it considered that Napster commercially

¹⁷¹ *Id.* at 1526. In addressing the second factor, the Ninth Circuit stated that “. . . the record clearly establishes that disassembly of the object code in Sega's video game cartridges was necessary in order to understand the functional requirements for Genesis compatibility. The interface procedures for the Genesis console are distributed for public use only in object code form, and are not visible to the user during operation of the video game program. Because object code cannot be read by humans, it must be disassembled, either by hand or by machine”. “Object code” is the public version of “source code”. Copyright owners keep the source code, the human readable code, to themselves in order to protect their creations.

¹⁷² *Id.* In the third factor, the Ninth Circuit concluded that “. . . Accolade disassembled entire programs written by Sega. Accordingly, the third factor weighs against Accolade”.

¹⁷³ *Id.* The Ninth Circuit further added that “[t]he fact that an entire work was copied does not, however, preclude a finding of fair use”.

¹⁷⁴ *Id.* at 1524. The Ninth Circuit concluded, concerning the fourth factor, “. . . that the fourth statutory factor weighs in Accolade's, not Sega's, favor, notwithstanding the minor economic loss Sega may suffer”.

¹⁷⁵ *Id.*

¹⁷⁶ *MAI Systems Corp. v. Peak Computer, Inc.*, 991 F.2d 511 (9th Cir. 1993).

¹⁷⁷ *Id.* See MULLIGAN, *supra* note 36, at 473.

¹⁷⁸ See RIMMER, *supra* note 165.

¹⁷⁹ *Napster*, *supra* note 28, at 1021. The Ninth Circuit disagreed with the District Court by stating that “[w]e depart from the reasoning of the district court that Napster failed to demonstrate that its system is capable of commercially significant noninfringing uses”.

benefited from having these music files shared through its service.¹⁸⁰ In addition, the Ninth Circuit found that the widespread transfer of these creative works, in this case music files, damaged the current and future market status for the authors.¹⁸¹ Furthermore, the Ninth Circuit stated that users were engaging in infringing behavior.¹⁸² The changes between *Napster* and *Betamax* are significant. First, the Court considered user's behavior in *Betamax* as a noncommercial private activity, while acknowledging the infringement acts of users in *Napster*. Second, the Court did not give importance to the effect on the potential market, but in *Napster* the Ninth Circuit highly relied on it.

C. The Canadian Fair Dealing

Unlike the US, the Canadian model of fair dealing used to entail a preliminary phase whereby the defendant has to prove the claim of fair dealing. This is similar to the UK model in that courts follow a similar test to the US model of fair use.¹⁸³ After 2004, the Supreme Court of Canada changed the rules of fair dealing claims.¹⁸⁴ Currently, the fair dealing test is based on the purpose of the dealing, its character, the amount of the dealing, alternatives to the dealing, nature of the protected work, and the effect of the dealing on the market.¹⁸⁵

One of the important Canadian cases in the field of software copyright is *Society of Composers, Authors and Music Publishers of Canada (SOCAN) v Bell Canada* (hereinafter *SOCAN*).¹⁸⁶ By relying on a previous case called *CCH Canadian Ltd. v. Law Society of Upper Canada* (hereinafter *CCH*) that introduced a broad interpretation of research works,¹⁸⁷ the Supreme Court of Canada found that song previews that exist on services such as iTunes are considered as fair dealing.¹⁸⁸ The Court at first acknowledged that fair dealing is a user's right, so there

¹⁸⁰ *Id.* at 1015. The Ninth Circuit stated that “[d]irect economic benefit is not required to demonstrate a commercial use. Rather, repeated and exploitative copying of copyrighted works, even if the copies are not offered for sale, may constitute a commercial use”.

¹⁸¹ *Id. supra* note 147.

¹⁸² *Id. supra* note 142.

¹⁸³ *SONG, supra* note 14, at 473.

¹⁸⁴ *Id.*

¹⁸⁵ *GEIST, supra* note 26, at 169-170.

¹⁸⁶ *Society of Composers, Authors and Music Publishers of Canada (SOCAN) v Bell Canada*, 2012 SCC 36. See *GEIST, supra* note 26, at 171-176.

¹⁸⁷ *CCH Canadian Ltd. v. Law Society of Upper Canada*, [2004] 1 S.C.R. 339, 2004 SCC 13.

¹⁸⁸ *SOCAN, supra* note 186, at ¶ 49. The Supreme Court agreed with the Copyright Board of Canada, a regulatory body for copyright matters, that “. . . previews satisfy the requirements of fair dealing and that the online service providers do not infringe copyright. In so concluding, the Board properly balanced the purposes of the Act by encouraging the creation and dissemination of works while at the same time ensuring that creators are fairly rewarded”.

was no need any longer to make the defendant prove his claim of fair dealing.¹⁸⁹ In the actual test, the Court considered the factors of the fair dealing test all together.¹⁹⁰ Before going through the fair dealing factors, the Court adopted an expansive approach to private studies and research, and it considered that listening to song previews is a matter similar to such research.¹⁹¹

After affirming the research aspect of song previews, the Court first looked at the purpose factor, which is whether the dealing is made through commercial or non-commercial reasons. The Court found that song previews are not downloaded, rather, they are streamed, so there was no copying *per se*. Although the Court found that there are commercial reasons for listening to a song preview, such as deciding whether to buy the song or not, it still considered that the research aspect of the song previews along with their limited functions or the “reasonable safeguards” makes this dealing fair.¹⁹²

Second, looking at the character of the dealing, the Court determined that as long as the dealing is made with a legitimate purpose, which is research in this case, or that the copy of the protected content is not stored after its use, the dealing is deemed fair.¹⁹³ In this case, even if a user listens to a song preview one hundred times, it would still not be stored as a copy on the device. Third, the Court addressed the amount of the dealing based on the size of the preview

¹⁸⁹ *Id.* at ¶ 11. The Court emphasized on the point that “CCH confirmed that users’ rights are an essential part of furthering the public interest objectives of the Copyright Act. One of the tools employed to achieve the proper balance between protection and access in the Act is the concept of fair dealing, which allows users to engage in some activities that might otherwise amount to copyright infringement. In order to maintain the proper balance between these interests, the fair dealing provision ‘must not be interpreted restrictively’”.

¹⁹⁰ *Id.* at ¶ 14. The Court stated that “[t]o assist in determining whether the dealing is ‘fair’, this Court set out the following six fairness factors for guidance: the purpose, character, and amount of the dealing; the existence of any alternatives to the dealing; the nature of the work; and the effect of the dealing on the work”.

¹⁹¹ *Id.* at ¶ 30. The Court determined that “. . . in considering whether previews are for the purpose of ‘research’ under the first step of CCH, the Board properly considered them from the perspective of the user or consumer’s purpose. And from that perspective, consumers used the previews for the purpose of conducting research to identify which music to purchase, purchases which trigger dissemination of musical works and compensation for their creators . . .”.

¹⁹² *Id.* at ¶ 35-36. First, the Court referred to the Board’s analysis that “. . . there were reasonable safeguards in place to ensure that the users’ dealing in previews was in fact being used for this purpose: the previews were streamed, short, and often of lesser quality than the musical work itself. These safeguards prevented the previews from replacing the work while still fulfilling a research function”. Then, the Court concluded that “the Board’s approach is consistent with CCH’s observation that while research done for commercial reasons may be less fair than research done for non-commercial purposes, the dealing may nonetheless be fair if there are ‘reasonable safeguards’ in place to ensure that the works are actually being used for research”.

¹⁹³ *Id.* at ¶ 37. In the second factor, the character of the dealing, the Court first referred to CCH’s analysis. It stated that “. . . the Court also pointed out, if a single copy of a work is used for a specific legitimate purpose, or if the copy no longer existed after it was used, this would favour a finding of fairness”. The Court further added that “The previews were streamed, not downloaded. Users did not get a permanent copy, and once the preview was heard, the file was automatically deleted from the user’s computer. The fact that each file was automatically deleted meant that copies could not be duplicated or further disseminated by users”.

in relation to a complete song; a preview was found to comprise only a very small part of the whole song.¹⁹⁴ Fourth, the Court found that the alternative means of accessing a song is to buy it with a return guarantee. It considered that paying the full price for a song just to access a small part of it does not constitute a reasonable alternative.¹⁹⁵ Fifth, the Court followed a similar reasoning as in *Kelly* finding that these previews actually served as a form of promotion of the songs.¹⁹⁶ Sixth, the Court criticized the claim of the potential negative effect on the market; for the Court, the only way that this factor would matter is through the existence of actual evidence that proves an economic harm.¹⁹⁷

D. The UK Fair Dealing

Fair dealing in the UK also serves the same purpose as the US model of fair use, which is to allow for certain copying acts using a particular set of factors. Unlike the US' model, however, the UK model of fair dealing requires the user to prove that the use falls under the enumerated list of uses; ¹⁹⁸ this, in turn, requires that the use be in accordance with the law, show an attribution of the original work, and especially be used for expression.¹⁹⁹ After the defendant fulfills these three requirements, the courts can then apply the fair dealing test which constitutes

¹⁹⁴ *Id.* at ¶ 39. In the third factor, amount or quantity of the dealing, the Court affirmed the Board's finding that "[t]he Board characterized the 'amount' of the dealing in terms of the length of each preview compared to the length of the work, concluding that streaming a preview of about 30 seconds was a modest dealing 'when compared to purchasing the whole work [approximately four minutes] for repeated listening'".

¹⁹⁵ *Id.* at ¶ 46. In the fourth factor, alternatives to the dealing, the Court also agreed with the Board's statement that ". . . '[l]istening to a preview probably is the most practical, most economical and safest way for users to ensure that they purchase what they wish' . . . As a result, it concluded that short, low-quality streamed previews are reasonably necessary to help consumers research what to purchase".

¹⁹⁶ *Id.* at ¶ 47. In the fifth factor, nature of the work, "which examines whether the work is one which should be widely disseminated", the Court commented on the plaintiff's claim that "SOCAN does not dispute the desirability of the sale and dissemination of musical works, but argues that since these works are easily purchased and disseminated without the use of previews, previews are of no additional benefit to promoting further dissemination. But the fact that a musical work is widely available does not necessarily correlate to whether it is widely disseminated. Unless a potential consumer can locate and identify a work he or she wants to buy, the work will not be disseminated".

¹⁹⁷ *Id.* at ¶ 48. In the sixth and final factor, "the effect of the dealing on the work and whether the dealing adversely affects or competes with the work", the Court concluded that "[b]ecause of their short duration and degraded quality, it can hardly be said that previews are in competition with downloads of the work itself. And since the effect of previews is to increase the sale and therefore the dissemination of copyrighted musical works thereby generating remuneration to their creators, it cannot be said that they have a negative impact on the work".

¹⁹⁸ This is quite similar to the strict fairness model in the rest of Europe that only follows a list of EPUs in determining the fairness of the copying act.

¹⁹⁹ SONG, *supra* note 14, at 469.

the nature of the work, method of obtaining the protected content, amount copied from the content, purpose of the use, effect on the market, and alternatives to the content.²⁰⁰

In *Pro Sieben Media AG v Carlton UK Television Ltd*,²⁰¹ the England and Wales Court of Appeal decided that an extract which had been taken by the defendant from the plaintiff's TV program constituted fair dealing. The Court of Appeal accepted the defendant's claim for fair dealing as the content fell under criticism or review, which can be interpreted under free expression.²⁰² Furthermore, the Court noted that the appearance of the plaintiff's logo on the defendant's copied content is sufficient attribution.²⁰³ The main factor that the Court of Appeal relied on was the amount copied from the program as it comprised only thirty seconds of the whole content.²⁰⁴

E. Enumerated Permissible Uses (EPUs)

The EPUs model does not have a fairness test like the ones addressed above. The EPUs model is simply a list of the copying acts that are allowed for copyrighted content. Essentially, this approach applies an "exhaustive list of exceptions to copyright."²⁰⁵ This is the reason the Google thumbnails and Google Books cases were decided differently compared to the US decisions. For instance, in Germany, Google was forced to change the thumbnails of pictures into texts that described them, but Google rejected such a solution due to the impracticality of the measure.²⁰⁶ However, in 2017, the German Federal Court of Justice found that thumbnails, which appear in image results on Google, do not constitute a copyright violation as it is not possible for the search provider to check whether each image that shows up in the search results

²⁰⁰ *Id.* 469-470.

²⁰¹ *Pro Sieben Media AG v Carlton UK Television Ltd*, [1999] 1 WLR 605, [1999] FSR 610. See SONG, *supra* note 13, at 470.

²⁰² *Id.* The England and Wales Court of Appeal stated that "[c]riticism or review' and 'reporting current events' are expressions of wide and indefinite scope. Any attempt to plot their precise boundaries is doomed to failure. They are expressions which should be interpreted liberally . . .".

²⁰³ *Id.* The Court found that "[t]he extract from the TAFF report was shown with the name TAFF appearing prominently in the bottom right-hand corner of the picture and . . . the logo of Pro Sieben in the top right-hand corner. That logo is a stylized figure 7, reflecting the fact that the plaintiff's name is the German equivalent of Channel Seven. It is accepted that the appearance of 'TAFF' was a sufficient acknowledgement of the title of the work, . . .".

²⁰⁴ *Id.* The Court reached ". . . the conclusion that the use of the extract was fair dealing . . . The extract shown was quite short, and it did not include any words spoken . . . it was not an attempt to dress up infringement of another's copyright in the guise of criticism".

²⁰⁵ SONG, *supra* note 14, at 477.

²⁰⁶ *Id.*

has been legally acquired or not.²⁰⁷ The Court's approach in this case reflects the reasonableness aspect of copyright measures which can also be found in the Canadian copyright cases.

F. Reasons to Reconsider the Factors of Fair Use/Dealing Doctrine

The US model of fair use has inspired other courts, such as Canada, to adopt a more expansive approach when determining the fairness of copying acts. The clearest aspect of this influence is the inclusion of similar factors into the fairness test. For example, the purpose of the dealing, found in Canada and UK's system, is the same as the first factor in the US model of fair use. In addition, the Supreme Court of Canada explicitly acknowledges the role of the US fair use model in shaping the current fair dealing test.²⁰⁸ The differences are minimal. For instance, the fair dealing test has an additional factor among the alternatives to the dealing. Nonetheless, in the US fair use model, it is also possible to address alternatives the use during the four-factor test. For example, in *Sega*, the US Ninth Circuit for the Court of Appeals determined that there was no other alternative for Accolade to access the Genesis but its "disassembly."²⁰⁹

The same resemblances apply to the UK model of fair dealing, except that the courts in the UK do not have to consider all of the factors in the test to determine the fairness of the dealing. Even in Germany, which follows the much stricter system of EPU's, has started to be more practical and seek other interpretations instead of solely relying on the EPU's. However, the EPU's system does not offer the means for balancing between authors' and users' interests like the fair use/dealing test, but this does not mean the latter system does not ignore certain themes that the fairness system is built upon.

1. The Public Benefit Behind the Use

One of the most essential themes in the cases of software copyright, and copyright in general, is the public benefit in acts of software copying. Although the fair use/dealing doctrine does

²⁰⁷ Hogan Lovells, *German Federal Court rules on Google's Image Search – Thumbnails*, available at <https://www.lexology.com/library/detail.aspx?g=7cb51dd8-3889-4954-a94d-6272cf41132f>.

²⁰⁸ *CCH*, *supra* note 187, at ¶ 53. The Supreme Court of Canada stated that "[a]t the Court of Appeal, Linden J.A. acknowledged that there was no set test for fairness, but outlined a series of factors that could be considered to help assess whether a dealing is fair. Drawing on the decision . . . as well as the doctrine of fair use in the United States, he proposed that the following factors be considered in assessing whether a dealing was fair . . .".

²⁰⁹ *Supra* note 167 & 170.

not contain any factor that measures public benefit behind a copying act, courts seek to determine public benefit when examining the use/dealing as this is ultimately the purpose of copyright law in the first place. However, determining the public benefit in software copyright cases have often relied on broad interpretations that do not provide clear indications for future cases, which is due to the absence of a legal principle capable of weighing such an aspect. The reason for such broadness is the technological advancement involved in copying acts, which is, for instance, what the US Supreme Court referred to in *Betamax*.²¹⁰ The Court noted that the new technology which is introduced in *Betamax* made the interpretation of the Copyright Act more difficult, but it did refer to “[t]he immediate effect of . . . copyright law . . . to secure a fair return for an `author's' creative labor” and that “the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good” as the “basic principle” that the Copyright Act should be construed by.²¹¹ Moreover, in *Sega*, the US Court of Appeals for the Ninth Circuit also referred to the importance of relying on this “basic principle” “[w]hen technological change has rendered an aspect or application of the Copyright Act ambiguous”.²¹²

In *Betamax*, the Supreme Court “acknowledged the public interest in making television broadcasting more available.”²¹³ In addition, The Ninth Circuit stated in *Sega* that it is “free to consider the public benefit resulting from a particular use notwithstanding the fact that the alleged infringer may gain commercially.”²¹⁴ It further added that a “[p]ublic benefit need not be direct or tangible, but may arise because the challenged use serves a public interest.”²¹⁵ The Ninth Circuit determined that a public benefit is reflected in “Accolade’s identification of the functional requirements for Genesis compatibility” which “has led to an increase in the number of independently designed video game programs offered for use with the Genesis console.”²¹⁶ However, the broad interpretations of public benefit did not always guide courts in determining such aspect. For instance, in *Napster*, the US Court of Appeals for the Ninth Circuit stated that “[w]e are at a total loss to find any special circumstances simply because this case requires us

²¹⁰ *Supra* note 39.

²¹¹ *Id.*

²¹² *Sega, supra* note 166, at 1527.

²¹³ *Betamax, supra* note 72.

²¹⁴ *Sega, supra* note 166, at 1523.

²¹⁵ *Id.*

²¹⁶ *Id.*

to apply well-established doctrines of copyright law to a new technology. Neither do we agree with Napster that an injunction would cause great public injury.”²¹⁷

The problem with such broad interpretation is that it does not indicate what comprises public benefit nor the factors that should determine such an aspect. Taking, for instance, the *SOCAN* case and the broad interpretation that the Canadian Supreme Court adopted for research works *vis-à-vis* song previews, it would be convenient to apply such an approach in *Napster*, especially that when Napster was released there were not so many song previews. Thus, the alternative for a user before deciding to buy an album, for example, is to listen to a song through Napster in order to make sure that this is the correct one that he or she intends to purchase. However, in *Kelly*, the US Court of Appeals for the Ninth Circuit determined that the “first factor weighs in favor of Arriba due to the public benefit of the search engine and the minimal loss of integrity to Kelly's images.”²¹⁸ The Ninth Circuit relied on the transformative character of Arriba's search engine through the showing of thumbnails.²¹⁹ The Ninth Circuit relied on this finding based on a previous case it had decided: *Sony Computer Entertainment America v. Bleem, LLC* (hereinafter *Bleem*).²²⁰

Bleem was an emulator program that allowed users to play video games that were released on the PlayStation platform over their personal computers. The issue in this case was the legality of *Bleem*'s advertisement strategy. *Bleem* used screen shots to present a comparison between PlayStation titles that are played on a computer and the console so that it could demonstrate to consumers how the *Bleem* emulator fared against Sony's PlayStation. Similar to *Kelly*, the Ninth Circuit relied on the first factor by stating that “[a]lthough *Bleem* is most certainly copying Sony's copyrighted material for the commercial purposes of increasing its own sales, such comparative advertising redounds greatly to the purchasing public's benefit with very little corresponding loss to the integrity of Sony's copyrighted material.”²²¹ The problem with *Bleem* is that the Ninth Circuit did not rely on the transformative character as it did later in *Kelly*. However, it tacitly employed proportionality in its strict sense when it determined that the harm done to Sony's products is justified by the public's interest in making "rational purchase

²¹⁷ *Napster*, *supra* note 28, at ¶ 92.

²¹⁸ *Kelly*, *supra* note 148.

²¹⁹ *Id.*, *supra* note 152, 153, & 154.

²²⁰ *Sony Computer Entertainment America v. Bleem, LLC* 214 F.3d 1022 (9th Cir. 2000).

²²¹ *Id.* at 1027.

decisions" when seeing Bleem's screen shots that compare playing video games on a computer screen to that of a TV.

The Ninth Circuit also, tacitly, relied on proportionality reasoning in determining whether copying a device's firmware would entail an injunction. In *Sony Computer Entertainment, Inc. v. Connectix Corp.* (hereinafter *Connectix*),²²² the Ninth Circuit was faced with the question of whether Connectix' copying of Sony's PlayStation firmware was fair use. Connectix's Virtual Game Station is, similar to Bleem, a computer software that functions as an emulator of PlayStation's video games so that users can load these titles on their personal computer. Connectix used its software, Virtual Game Station, in copying the BIOS or firmware of Sony's console in order to emulate the functionality of Sony's PlayStation so that the console's titles would run on a computer. In following the footsteps of *Sega*, the Ninth Circuit affirmed the fair use defense.²²³ Concerning the aspect of public interest in this case, the Ninth Circuit concluded that "the downloading infringement, if such it was, would not justify our upholding the injunction on the development and sale of the Virtual Game Station . . . Bearing in mind the goals of the copyright law, 'to stimulate artistic creativity for the general public good,' . . . there is a legitimate public interest in the publication of Connectix's software" and determined "that it would be inappropriate to uphold the injunction because of Connectix's copying and use of the downloaded Sony BIOS."²²⁴ The Ninth Circuit affirmed that the negative effects sustained by Sony did not rise to the level of gravity that would justify halting the development of Connectix's software.

Therefore, the fair use/dealing factors by themselves do not provide enough guidance in determining the public benefit in copyright cases. While it is true that the fairness analysis²²⁵

²²² *Sony Computer Entertainment V. Connectix Corp.*, 203 F.3d 596 (9th Cir. 2000).

²²³ *Id.* at 608. The Ninth Circuit found that "[t]he four statutory fair use factors must be 'weighed together, in light of the purposes of copyright.' . . . Here, three of the factors favor Connectix; one favors Sony, [amount and substantiality of the portion used] and it is of little weight. Of course, the statutory factors are not exclusive, . . . but we are unaware of other factors not already considered that would affect our analysis. Accordingly, we conclude that Connectix's intermediate copying of the Sony BIOS during the course of its reverse engineering of that product was a fair use . . .".

²²⁴ *Id.*

²²⁵ GRAHAM REYNOLDS, OF REASONABLENESS, FAIRNESS AND THE PUBLIC INTEREST: JUDICIAL REVIEW OF COPYRIGHT BOARD DECISIONS IN CANADA'S COPYRIGHT PENTALOGY, In Michael Geist (ed.), *The Copyright Pentalogy: How the Supreme Court of Canada Shook the Foundations of Canadian Copyright*, 19 (2013). In this paper, the author discussed, among other things, the rationale behind the Canadian Supreme Court's decision in *CCH Canadian Ltd. v. Law Society of Upper Canada*. The author used the term fairness analysis to describe the second part of the fair dealing analysis, which includes the six factors of the fair dealing test, from the Supreme Court's perspective because it is where the "analytical heavy-hitting is done in determining whether the dealing was fair". Fairness analysis is also used to describe the multiple types of interactions between people and

does not limit courts to seeking other legal principles, it should not be a habitual performance that courts almost always rely on broad or general interpretations when applying the fairness analysis. The factors should provide courts enough guidance in software copyright cases in order to lower the instances when courts refer to external legal explanations in order to maintain the usefulness of the fairness analysis. Courts try to extend the factors to properly consider the public interest in copyright cases, but there are cases where the public interest is clear enough to be noted, such as the criticism in *Pro Sieben*.²²⁶ On the other hand, even the transformative use that courts in the US often relied upon was not enough in some cases. This led courts, such as the Ninth Circuit, to tacitly apply proportionality in its strict sense in order to determine whether the level of harm faced by the copyright owner would justify banning the defendant, and consequently all subsequent acts, from engaging in the copying behavior.

2. Non-Contributory Factors to the Fairness Analysis

In some software copyright cases, not only does measuring public benefit become difficult, there are also factors that do not provide much help to courts or reveal new findings when conducting the fairness analysis. For instance, the Canadian fair dealing splits the first factor into two separate steps, purpose and character. The character step sees whether “a particular dealing might be unfair if multiple copies of works are being widely distributed,”²²⁷ However, the fifth factor, nature of the copyrighted work, also “examines whether the work is one which should be widely disseminated.”²²⁸ These two factors are unproductive.

First, the character step does not identify the reason for which the wide distribution of copies would be unfair, but the Court did state that “a single copy of a work is used for a specific legitimate purpose . . . may be . . . a fair dealing”. However, nothing refers to the considerations of unfairness in case “multiple copies of works are being widely distributed”.

Second, the nature of the copyrighted work factor does offer clear indications as to whether the protected work should be widely disseminated. The Court does stress the importance of wide distribution of research content but has not sufficiently addressed the reason for which a work

tangible/intangible content. See Rongqing Dai, *A Brief Introduction to Fairness Analysis*, available at <https://www.omicsonline.org/open-access/a-brief-introduction-to-fairness-analysis-2151-6200.100095.php?aid=36912#F3>.

²²⁶ *Pro Sieben*, *supra* note 203.

²²⁷ *SOCAN*, *supra* note 186, at ¶ 37.

²²⁸ *Id.* at ¶ 47.

should have limited distribution. It acknowledges that “if a work has not been published, the dealing may be more fair in that its reproduction with acknowledgement could lead to a wider public dissemination of the work - one of the goals of copyright law. If, however, the work in question was confidential, this may tip the scales towards finding that the dealing was unfair.”²²⁹ The distinction between unpublished and confidential content does not offer much in determining the ultimate goal of the factor, which is whether a work should be widely disseminated or not. In addition, the Court did not specify the meaning of a confidential work.

Third, if a work turns out to be one that should be widely disseminated and the dealing involves multiple copies that are widely distributed, this arises as to how courts or the Copyright Board should address such cases. Most likely the consideration of both factors would end in a draw. The character step would favor the plaintiff, while the nature of the copyrighted step would favor the defendant.

Fourth, in both factors, the Court did not define what “wide” dissemination actually entails including how large a dissemination would have to be in order to be considered wide. However, factors that do not offer much guidance to courts also exist in the US fair use model.

The four-factor test also includes certain inefficiencies when it comes to fairness analysis. To demonstrate, the first factor, which is purpose and character, predominantly matters when the character of the use is transformative such as in *Campbell*,²³⁰ *Connectix*,²³¹ *Kelly*,²³² and *Google Books*.²³³ Courts do take into account whether the use is for commercial or non-commercial purposes, but these purposes are often eclipsed by other factors than their transformative character, such as in *Sega*²³⁴ and *Bleem*.²³⁵ It is worth noting that the Ninth Circuit could have identified the transformative character in *Sega* because Accolade changed

²²⁹ *CCH*, *supra* note 187, at ¶ 58.

²³⁰ *Campbell*, *supra* note 135.

²³¹ *Connectix*, *supra* note 222. at 606-607. The Ninth Circuit stated “. . . that Connectix's Virtual Game Station is modestly transformative”, while determining that its “. . . commercial use of the copyrighted material was an intermediate one”. This means that Connectix’s commercial and transformative use are equally existing, so the court noted that “. . . we must weigh the extent of any transformation in Connectix's Virtual Game Station against the significance of other factors, including commercialism, that militate against fair use’. Nonetheless, the Ninth Circuit found “. . . that the first factor favors Connectix”. Thus, giving the transformative character more value over Connectix’s commercial purpose.

²³² *Kelly*, *supra* note 150, 151, & 155.

²³³ *Google Books*, *supra* note 161.

²³⁴ *Sega*, *supra* note 169. As indicated the Ninth Circuit did not even consider the transformative character of Accolade’s use.

²³⁵ *Bleem*, *supra* note 221. As demonstrated, the Ninth Circuit considered Bleem’s commercial purpose is publicly beneficial as it contributes to consumers to make "rational purchase decisions".

how Genesis interacts with its video games by transforming the device's object code to source code so that it could achieve interoperability between Genesis and Accolade's titles. The Ninth Circuit even explicitly recognizes the transformative aspect when stating the facts by saying that "Accolade transformed the machine-readable object code contained in commercially available copies of Sega's game cartridges into human-readable source code using a process called 'disassembly' or 'decompilation'."²³⁶

Similarly, the Ninth Circuit could have also considered the screenshots that were taken from Bleem as transformative in character. This is because Bleem used the screenshots as a way to preview the emulator capabilities compared to Sony's console, not just for showing imagery of a video game. The Ninth Circuit, similarly, considered it in *Kelly* as it found Arriba's use of thumbnails revealed by its search engine, facilitated users' access to Kelly's content.²³⁷ While this does not reflect the practicality of considering the commercial or non-commercial purposes in cases of software copyright, this does prove, however, the influential impact of the transformative character, which is considered only in the US fair use model, especially that courts commonly link the transformative character of a use to achieve a public benefit, which is a primary objective in copyright law.

Additionally, the second factor, nature of the copyrighted work, also does not provide much guidance in cases of software copying. For instance, in *Campbell*, the US Supreme Court stated that "'the nature of the copyrighted work,' is not much help in resolving this and other parody cases, since parodies almost invariably copy publicly known, expressive works."²³⁸ Furthermore, the US Court of Appeals for the Ninth Circuit also followed the Supreme Court's statement regarding the second factor, nature of the copyrighted work, as it had in *Bleem*. It found that the defendant's screenshots are just still images of content related to Sony,²³⁹ so this factor favored neither of the parties.²⁴⁰ Thus, the second factor did not contribute to the findings of the case.

²³⁶ *Sega*, *supra* note 166, at 1514.

²³⁷ *Kelly*, *supra* note 152.

²³⁸ *Campbell*, *supra* note 130.

²³⁹ *Bleem*, *supra* note 220, at 1028. The Ninth Circuit stated that "[i]n this case, the copyrighted work and the copies are both commercial video game products; although the copyrighted work is creative in nature generally, a screen shot is not necessarily. A screen shot is merely an inanimate sliver of the game".

²⁴⁰ *Id.* at 1028. The Ninth Circuit found that "[t]he Supreme Court has passed over this factor without giving it much attention, stating that it is often 'not much help.' . . . In this Court, too, we have spent very little energy parsing it in video game cases . . . in *Connectix*, the panel explored the factor and found against Sony since

Furthermore, the third factor, amount and substantiality of the used portion, is also not much help in software copyright cases, especially that most software copying acts involve the taking of a large amount, if not all, of the content. Although the Supreme Court did state in *Betamax* that even copying the totality of the protected work does not negate the finding of fair use,²⁴¹ courts were little guided by this factor when interpreted in software copyright cases. For instance, in *Kelly*, the Ninth Circuit determined that the third factor does not apply to either of the parties as Arriba's copying of the entirety of Kelly's images was "reasonable" and "necessary" in order maintain the utility of the search engine.²⁴² Moreover, in *Campbell*, the Supreme Court was not able to decide on this factor and remanded the case to the lower court to equally reevaluate the third factor with the other ones.²⁴³ Although *Campbell* is not related to software copyright, it serves as an example of how the amount and substantiality of the used portion can also be non-influential in the fairness analysis.

Finally, this discussion leads us to the fourth factor, which is the effect of use upon the potential market for or value of the copyrighted work. Although this factor has proven to be highly influential in fairness analysis, especially that the Supreme Court stated that it is "undoubtedly the single most important element of fair use,"²⁴⁴ it can also be a less indicative factor when it comes to determining real harm to the plaintiff's market. In *Sega*, the Ninth Circuit, counting the fourth factor in favor of Accolade,²⁴⁵ determined that Sega's conduct in monopolizing the market by restricting access to its Genesis is not within the objectives of copyright law.²⁴⁶ However, in *Napster*, the Ninth Circuit found that Napster harmed the plaintiffs by creating "barriers" that would hinder their access to the "market for the digital downloading."²⁴⁷ The

Connectix could not create its emulator without necessarily making some copies of the Sony material . . . in this appeal this factor 'neither supports nor hurts [defendant's] claim that a fair use defense is appropriate here'".

²⁴¹ *Betamax*, *supra* note 141.

²⁴² *Kelly*, *supra* note 148 at 821. Concerning the amount and substantiality of the used portion, the Ninth Circuit stated that "[t]his factor neither weighs for nor against either party because, although Arriba did copy each of Kelly's images as a whole, it was reasonable to do so in light of Arriba's use of the images. It was necessary for Arriba to copy the entire image to allow users to recognize the image and decide whether to pursue more information about the image or the originating web site. If Arriba only copied part of the image, it would be more difficult to identify it, thereby reducing the usefulness of the visual search engine".

²⁴³ *Campbell*, *supra* note 130, at 589. The Supreme Court stated that ". . . we express no opinion whether repetition of the bass riff is excessive copying, and we remand to permit evaluation of the amount taken, in light of the song's parodic purpose and character, its transformative elements, and considerations of the potential for market substitution . . .".

²⁴⁴ *Harper*, *supra* note 48, at 567.

²⁴⁵ *Sega*, *supra* note 174.

²⁴⁶ *Id.* at 1524. The Ninth Circuit concluded that ". . . an attempt to monopolize the market by making it impossible for others to compete runs counter to the statutory purpose of promoting creative expression and cannot constitute a strong equitable basis for resisting the invocation of the fair use doctrine".

²⁴⁷ *Napster*, *supra* note 147.

wording here differs significantly as the former means that there is deliberate conduct for making no room for competition while the latter reflects the opposite. The word “barriers” does not apply to *Napster* as the defendant did not create a certain security measure or firmware that would, actually, restrict the plaintiff from directly entering the digital market. Moreover, the Supreme Court stated that “the goal of copyright, to promote science and the arts, is generally furthered by the creation of transformative works. Such works thus lie at the heart of the fair use doctrine's guarantee of breathing space within the confines of copyright”,²⁴⁸ which gives other factors less magnitude compared to such transformative works.²⁴⁹

In *Connectix* and *Kelly*, the Ninth Circuit followed suit by affirming that a transformative use is not likely to cause a harm to the plaintiff's market compared to a use that only duplicates the original content.²⁵⁰ Moreover, in *Connectix*, the Ninth Circuit also referred to its finding in *Sega* by stating that “Sony understandably seeks control over the market for devices that play games Sony produces or licenses” and that “[t]he copyright law . . . does not confer such a monopoly.”²⁵¹ The Ninth Circuit interpreted the fourth factor on the basis that a use can create enriching competition which can prevent the copyright owners from dominating the market, hence diminishing other creative works. However, in *Google Books*, the Second Circuit referred to copyright as “a commercial right, intended to protect the ability of authors to profit from the exclusive right to merchandise their own work,”²⁵² so when Sony and Sega chose to include a certain level of exclusivity in their promotion of their devices, PlayStation and Genesis, it did not interfere with exercising their “commercial right”. For instance, the fact that Sony makes some video games exclusively available to PlayStation does not necessarily mean that it aims to monopolize the entire video game market through its console.²⁵³ Therefore, the function of the fourth factor does not indicate whether courts should consider the existence

²⁴⁸ *Campbell*, *supra* note 130, at 579.

²⁴⁹ *Id.* at 130.

²⁵⁰ *Kelly*, *supra* note 155. In *Connectix*, *supra* note 222, at 607, the Ninth Circuit noted the District Court's finding that “[t]o the extent that such a substitution [of Connectix's Virtual Game Station for Sony PlayStation console] occurs, Sony will lose console sales and profits.” . . . We recognize that this may be so. But because the Virtual Game Station is transformative, and does not merely supplant the PlayStation console, the Virtual Game Station is a legitimate competitor in the market for platforms on which Sony and Sony-licensed games can be played”.

²⁵¹ *Id.*

²⁵² *Google Books*, *supra* note 156.

²⁵³ The Ninth Circuit's interpretation, however, may reflect the influence of the utilitarian and social planning theories in achieving social welfare or an appealing culture by creating a diverse competition, resulted from a transformative use, that leads to further creative works. Alternatively, the Ninth Circuit's rationale can also point towards a Lockean influence in making sure that “there is enough and as good left in common for others”, so the Ninth Circuit could have seen in Sony and Sega's policy of conducting their business that their monopolistic attempts will eventually lead to not enough room for others to enter the video games market.

of fair competition, obstacles created by the contested use that hinder the plaintiff's access to a certain market, or just the net effect of the use on the copyright owner's financial status.

Nonetheless, the transformative aspect of a use remains a strong indicator in weighing the fourth factor. Even though the Ninth Circuit did affirm in *Sega*,²⁵⁴ *Connectix*,²⁵⁵ and *Google Books*²⁵⁶ some financial losses resulting from the defendants' secondary uses, the transformative character of the copying acts gave them a superior value over such losses. This further strengthened what the Second Circuit stated in *Google Books* that the more the use is transformative "the more it serves copyright's goal of enriching public knowledge" and the less likely it will diminish "the protected market opportunities of the copyrighted work."²⁵⁷

Therefore, it is the transformative character, at least in the US model, that has proven to be the single step that influences courts to narrow their interpretations of the other factors and keep the fairness analysis focused as much as possible on the ultimate objective of copyright law, which is protecting the public benefit.

3. The One-Sided Balancing of the Fairness Analysis

The nature of the factors that are applied during analysis which point toward the defendant, makes the process of recalibrating these factors to include the plaintiff's conduct in the balancing process quite difficult. It is only the nature of the copyrighted work that can be considered as a factor that look towards the plaintiff, but this factor has proven to be unproductive as previously discussed. The factor of alternatives to the dealing is somewhat neutral between both the plaintiff and the defendant as it looks at the extent of necessity behind the dealing. This means that if there is a "non-copyrighted equivalent of the work" or that the purpose is not among important objectives, such as research purposes, then the dealing would be deemed unnecessary. On the other hand, if there are no substitutes for the protected content or if there is a higher cause in making the contested dealing, then it would be considered as fair.

However, the issue in this factor, the alternative to the dealing, is the difficulty, or even the unsuitability of making a compilation of works in order to decide whether there is an alternative

²⁵⁴ *Sega*, *supra* note 174.

²⁵⁵ *Connectix*, *supra* note 249.

²⁵⁶ *Google Books*, *supra* note 165.

²⁵⁷ *Google Books*, *supra* note 156.

to the dealing. This is because non-copyrighted content is not formally registered as a protected work which increases the difficulty of searching for non-copyrighted works as these works would require parties to look through countless sources in order to find a suitable alternative, which makes this factor impractical. Furthermore, to determine whether a purpose is significant enough to justify the dealing is not quite indicative in the fairness analysis. As previously discussed, even if the purpose appears to be noncommercial, it does not hold much weight in a way that makes the purpose factor almost weightless during the fairness analysis. Thus, the current status of the fair use/dealing test makes the weighing process between the authors' interests against the users' responsibilities, which in turn makes the defendant the object of greater scrutiny compared to the plaintiff.

For this reason, conducting a balancing process without weighing the interests and responsibilities of both copyright owners and users will lead to either an enforced tilting of the balancing process in favor of users, such as in *Betamax* where the Supreme Court favored the personal uses of consumers in recording live broadcasts, or to make the test *a priori* inclined towards the plaintiff's interest, such as in *Napster* where the Ninth Circuit rejected Napster's claim of space-shifting as it saw that the service involved public distribution.

In conclusion, the principle of fair use/dealing is important to preserve in the system of copyright. However, there are drawbacks in the principle of fair use/dealing that hinder its application in cases of software copyright. The next chapter looks at other principles that are applied on claims of software copyright infringement in order to find the possible remedies in addressing the disadvantages of fair use/dealing and to maintain its advantages.

IV. Other Possible Modes of Defenses in Claims of Software Copyright Infringement

There are other legal concepts that are used to determine whether copying is fair or an infringement. The most relevant ones in this paper, are originality, technological neutrality, and proportionality. The importance of examining other legal principles in the field of copyright lies in their effectiveness in solving copyright claims. Although these three principles discussed in this chapter are not directly related to fair use/fair dealing, they serve an important role in cases of software copyright. For this reason, studying these principles can help in addressing the shortcomings of fair use/fair dealing through the observation of wider aspects in software copyright. Each of these concepts will be addressed in separate sections following.

A. Originality

The concept of originality is known as “the *sine qua non* of copyright.”²⁵⁸ It means that originality is an indispensable condition for earning copyright. The threshold of originality is one of the possible defenses that a defendant can opt for in claims of copyright infringement. In his work, Paul Goldstein²⁵⁹ wonders about the reason behind the ongoing admiration shown by legal experts towards fair use, and not paying attention to other principles that may also be beneficial in addressing the complex situations of copyright such as originality.²⁶⁰ In Goldstein’s view, the reason for such admiration is the nature of the fair use relationship between creators and users’ rights. However, originality can be also considered as a balancing tool in its own right because it aims to maintain the equilibrium between the content’s originality in securing the creator’s incentives and avoiding excessive restriction measures for uncopyrightable content.²⁶¹ This does not mean, however, that originality is not without its own problems.

²⁵⁸ *Feist Publications, Inc., v. Rural Telephone Service Co.*, 499 U.S. 340, 345 (1991).

²⁵⁹ PAUL GOLDSTEIN, *FAIR USE IN CONTEXT*, 31 *Colum. J.L. & Arts* 433 (2008).

²⁶⁰ *Id.* 434. Goldstein mentioned originality as an example for a potential starting point to formulate a theory of copyright as a demonstration on the existence of other legal principles that are also important in the field of copyright. By analogy, addressing the issue of fair use/dealing in software copyright should also incorporate an examination of other legal principles, such as originality, that serve an important role in cases of copyright infringement.

²⁶¹ MCJOHN, *supra* note 108, at 90. Here, Mcjohn refers to the resemblance of the balancing process between fair use and originality in achieving the role of copyright law. Therefore, to fix the balancing issues in the fairness analysis, one should observe other legal principles, such as originality, that follow a similar balancing function of the fair use/dealing doctrine in order to identify the possible advantages of similar legal principles that could cover the disadvantages of the fairness analysis.

Originality is the essence of any copyright law as it simply determines whether a content is eligible for protection under copyright laws or not.²⁶² Throughout the development of originality in legal history, the concept is mainly based on the independent creation of a work and showing “a modicum of creativity.”²⁶³ Therefore, originality is not related to the quality of something being new or unusual, rather, it is about showing some sort of self-created work that reflects a modest level of creativity.²⁶⁴ In general, and since the threshold of originality is very low, courts most often find that any work meets the requirement of originality’s standards.²⁶⁵ However, in some cases, courts have found that a work which is supposed to be available to the public or does not show a certain level of imagination is not original enough, and hence, not protected by copyright laws.²⁶⁶ The most important development of the concept of originality that caused an impact on cases of software copyright began in the late 1900s.²⁶⁷

When the term originality was incorporated to US Copyright act of 1976, the Congress did not define what the extents and limits of originality were.²⁶⁸ As a result, the task of identifying the scope of originality was left to the courts.²⁶⁹ This task was undertaken by the US Supreme Court in 1991 in the case of *Feist Publications, Inc. v. Rural Telephone Service Co* (hereinafter *Feist*).²⁷⁰ The Rural Telephone Service Company is a public utility provider in a small town in the state of Kansas that gathered telephone directories of all its customers. Feist Publications specializes in gathering telephone directories from many areas within Kansas. Rural discovered that Feist had copied many entries from its directory. As a result, Rural filed a lawsuit against Feist for copyright infringement. The Supreme Court found that Feist’s act of copying telephone records did not constitute an infringement as Rural’s work of compiling telephone

²⁶² See EDWARD LEE, DIGITAL ORIGINALITY, 14 Vand. J. Ent. & Tech. L. 919, 920 (2012). See MICHAEL PALUMBO, COPYRIGHT PROTECTION FOR THE FRUITS OF DIGITAL LABOR: FINDING ORIGINALITY IN DIGITAL WIRE-FRAMES, 44 New Eng. L. Rev. 127, 128 (2009). See AURELIJA LUKOSEVICIENE, ON AUTHOR, COPYRIGHT AND ORIGINALITY: DOES THE UNIFIED EU ORIGINALITY STANDARD CORRESPOND TO THE DIGITAL REALITY IN WIKIPEDIA, 11 Masaryk U. J.L. & Tech. 215, 217 (2017). See KATHY BOWREY, ON CLARIFYING THE ROLE OF ORIGINALITY AND FAIR USE IN 19TH CENTURY UK JURISPRUDENCE: APPRECIATING 'THE HUMBLE GREY WHICH EMERGES AS THE RESULT OF LONG CONTROVERSY', 14, (2010) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1402444. See MICHAEL MURRAY, COPYRIGHT, ORIGINALITY, AND THE END OF THE SCENES A FAIRE AND MERGER DOCTRINES FOR VISUAL WORKS, 8-9, (2006) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=900148. In these writings, the authors stress on the importance of originality in advancing the goals of copyright, especially due to its balancing nature.

²⁶³ *Id.*, BOWREY, at 6. LEE, at 920. MURRAY, at 9-10.

²⁶⁴ *Id.* LUKOSEVICIENE, *supra* note 262, at 217.

²⁶⁵ *Id.*

²⁶⁶ *Id.*

²⁶⁷ LEE, *supra* note 262, at 922.

²⁶⁸ *Id.*

²⁶⁹ *Id.*

²⁷⁰ *Feist*, *supra* note 258. See PALUMBO, *supra* note 262, at 137-141.

records did not reflect a minimum level of creativity, regardless of the work and effort behind its creation.²⁷¹ The Court, however, noted that the facts in themselves, such as names and addresses, are not copyrightable, but the compilation of these facts may be protected by copyright.²⁷² The Supreme Court reverted to the Court of Appeals for the Tenth Circuit's decision as the latter affirmed that Feist had infringed on Rural's copyright based on the labor and effort invested in gathering telephone directories. The Tenth Circuit, and also the District Court, affirmed that telephone records are copyrightable works based on the sweat of the brow doctrine.²⁷³ However, the Supreme Court followed an originality test that is based on the independent creation of a work and its fulfilling a certain level of creativity, which Rural's work failed to pass.

The *Feist* case is an important part of the foundation for the application of the originality test in copyright cases. However, it has caused considerable debate in terms of software copyright. In 2008, the US Court of Appeals for the Tenth Circuit found that the creation of digital wire-frames²⁷⁴ was not creative enough to be protected by copyright in the case of *Meshwerks Inc. v. Toyota Motor Sales USA Inc* (hereinafter *Meshwerks*).²⁷⁵ The Court stated that the work of digital wire-frames did not show independent work or any sort of creativity as Meshwerks only copied preexisting Toyota car models.²⁷⁶ Although the Court noted the extensive effort made

²⁷¹ *Id.* at 363-364. The Supreme Court found that "[t]he white pages do nothing more than list Rural's subscribers in alphabetical order. This arrangement may, technically speaking, owe its origin to Rural; no one disputes that Rural undertook the task of alphabetizing the names itself. But there is nothing remotely creative about arranging names alphabetically in a white pages' directory" as it "... does not possess the minimal creative spark required by the Copyright Act and the Constitution". The Court concluded that "Because Rural's white pages lack the requisite originality, Feist's use of the listings cannot constitute infringement. This decision should not be construed as demeaning Rural's efforts in compiling its directory, but rather as making clear that copyright rewards originality, not effort".

²⁷² *Id.* at 357. The Court stated that "... facts are not copyrightable ... compilations of facts generally are".

²⁷³ *Id.* at 352. The sweat of the brow doctrine is the opposite of originality as the former measures the effort behind making a content, while the latter requires a certain level of creativity without considering the effort behind the content's creation. Therefore, the sweat of the brow's only standard is that whether the content is independently created. In criticizing the adoption of earlier courts for the sweat of the brow doctrine, and consequently the decision of both the Tenth Circuit and District Court, the Supreme Court stated that "... these courts developed a new theory to justify the protection of factual compilations. Known alternatively as 'sweat of the brow' or 'industrious collection,' the underlying notion was that copyright was a reward for the hard work that went into compiling facts".

²⁷⁴ Wire-frames are designs of shapes without adding shading, colors, textures, and lighting. In the case of *Meshwerks*, the plaintiff designed Toyota car models in the form of wire-frames. The purpose of these designs is to create a simulation of Toyota cars so that it can be used as a foundational design, a sketch, for other purposes, such as advertisements.

²⁷⁵ *Meshwerks Inc. v. Toyota Motor Sales USA Inc.* 528 F 3d 1258 (2008). See PALUMBO, *supra* note 262, at 144.

²⁷⁶ *Id.* at 1270. The Tenth Circuit concluded that "[t]he designs of the vehicles ... owe their origins to Toyota, not to Meshwerks, and so we are unable to reward Meshwerks' digital wire-frame models, no doubt the product of significant labor, skill, and judgment, with copyright protection. See LEE, *supra* note 262, at 927-928.

by Meshwerks, it rejected the contention that Meshwerks' designs met the threshold of originality.²⁷⁷

The *Meshwerks* decision drew strong criticism due to the lack of acknowledgement of the role of advanced technology in creating art.²⁷⁸ The decision also reflects the tendency for designs which originate in physical form to be more likely considered original compared to works that are digitized. However, it is important to introduce a different perspective in this case. Taking a step back to the Google Books project that began in 2004 and escalated into a legal dispute that ended few years ago,²⁷⁹ one notices that the fair use test, especially the transformative use factor, would have considered the design of Toyota cars into digital wire-frames as being fair. By applying the same rationale of, at least, transformative use in the case of *Google Books* or the use of thumbnails in *Kelly*,²⁸⁰ it would result in acknowledging that the act of digitizing Toyota car models is the same as Google's attempt at the digitization of books or Arriba's use of thumbnails that had a lower quality compared to the original photos. Applying the transformative factor, the most decisive factor in cases of software copyright, to *Meshwerks* does give some merit to the opinion that fair use should be applied on the plaintiff or those who claim the copyright of their work.²⁸¹

Originality also witnessed an important development in Europe in 2009.²⁸² In the case of *Infopaq International A/S v Danske Dagblades Forening* (hereinafter *Infopaq*),²⁸³ the Court of Justice of the European Union (CJEU) found that copying words from previous news articles in the form of 11-word extracts is subject to copyright protection.²⁸⁴ Infopaq scanned news articles, published by Danske Dagblades Forening (DDF), in order to provide its customers short extracts of 11-words so that the process of searching for certain articles would become more easy.²⁸⁵ It is similar to the Google Books project which aimed to give consumers an easier

²⁷⁷ *Id.*

²⁷⁸ LEE, *supra* note 262, at 930-932. PALUMBO, *supra* note 262, at 146-147.

²⁷⁹ *Google Books*, *supra* note 159.

²⁸⁰ *Kelly*, *supra* note 151.

²⁸¹ PATTERSON, *supra* note 4, at 266.

²⁸² LUKOSEVICIENE, *supra* note 262, at 217.

²⁸³ *Infopaq International A/S v. Danske Dagblades Forening* (2009) Case no. C-5/08. Court of Justice of the European Union, ECR 1-06569. <https://eur-lex.europa.eu/legal-content/GA/TXT/?uri=CELEX:62008CJ0005>.

²⁸⁴ *Id.* at ¶ 74. The CJEU concluded that "... the act of printing out an extract of 11 words, during a data capture process such as that at issue in the main proceedings, does not fulfil the condition of being transient in nature ... and, therefore, that process cannot be carried out without the consent of the relevant rightholders". See LUKOSEVICIENE, *supra* note 262, at 217-218.

²⁸⁵ Maria Fredenslund, *Denmark: Infopaq-case finally decided after eight years*, <http://copyrightblog.kluweriplaw.com/2013/05/17/denmark-infopaq-case-finally-decided-after-eight-years/>.

way to search through the books by providing snippets that resulted from scanning the books.²⁸⁶ Although the 11-word extracts were also small reproductions, the CJEU found that Infopaq's partial reproduction of DDF's articles required prior consent. To do this, the CJEU established the concept of "free creative choices" in order to determine the originality of the news articles.²⁸⁷ The Court concluded that in the case of news articles originality, is reflected in the way words are expressed, and such expression is found throughout the entire article which makes it fall under the protection of copyright law whether in full copying of all pages of the work, or in part, such as the 11-word extracts.²⁸⁸

In 2010, the CJEU faced another issue related to the eligibility of graphics user interface (GUI) to be protected by copyright.²⁸⁹ The Computer Programs Directive protects any expression in the form of a computer program under the European copyright law.²⁹⁰ However, in *Bezpečnostni softwarovd asociace- Svaz softwarove ochrany v. Ministerstvo kultury*²⁹¹ (hereinafter *BSA*), the Court found that works which result from the functionality of a computer program are uncopyrightable.²⁹² This means that a GUI that is a requirement for a computer program to function is not an intellectual creation and, hence, not original.²⁹³ The *BSA* case shares a similarity with the *Meshwerks* case as the Tenth Circuit also found that the digital wire-frames are not original enough because they draw their existence from pre-designed Toyota car models.²⁹⁴ Therefore, the same alternative perspective applied in *Meshwerks* can be

²⁸⁶ *Google Books*, *supra* note 158.

²⁸⁷ *Infopaq*, *supra* note 283, at ¶ 45. The CJEU stated that "[r]egarding the elements of such works covered by the protection, it should be observed that they consist of words which, considered in isolation, are not as such an intellectual creation of the author who employs them. It is only through the choice, sequence and combination of those words that the author may express his creativity in an original manner and achieve a result which is an intellectual creation".

²⁸⁸ *Id.* ¶ 47. The CJEU found that "... the possibility may not be ruled out that certain isolated sentences, or even certain parts of sentences in the text in question, may be suitable for conveying to the reader the originality of a publication such as a newspaper article, by communicating to that reader an element which is, in itself, the expression of the intellectual creation of the author of that article".

²⁸⁹ LUKOSEVICIENE, *supra* note 262, at 218-219.

²⁹⁰ *Id.*

²⁹¹ *Bezpečnostni softwarovd asociace- Svaz softwarove ochrany v. Ministerstvo kultury* (2010) Case no. C-393/09. Court of Justice of the European Union, ECR 1-13971.

²⁹² *Id.* at ¶ 49. The CJEU concluded that "... where the expression of those components is dictated by their technical function, the criterion of originality is not met ...".

²⁹³ *Id.* ¶ 50. The Court further added that "... the components of a graphic user interface do not permit the author to express his creativity in an original manner and achieve a result which is an intellectual creation of that author".

²⁹⁴ *Meshwerks*, *supra* note 276.

used in the *BSA* case as transformative use would have changed the outcome of the case. The reason is that a GUI transforms the computer program in order to make it useable by its users.

When a creator produces a work, that content is not fully the author's creation as it draws inspiration and elements from the society.²⁹⁵ Therefore, determining originality should follow a mechanism that examines the contribution of the author's content to the surrounding society, not a tool to be limited in determining the originality of the content in relation to the author's creation alone.²⁹⁶ The concept of originality is important in copyright laws as it seeks to identify the copyrightable content from the uncopyrightable ones, but it seems that the current application of originality in cases related to software copyright reflect the same difficulty of applying the balance in the fair use/dealing doctrine. The core drawback in originality is that the balancing process points towards the plaintiff only as there are no considerations of what the content signifies to the public. Originality on its own is an insufficient legal mechanism to determine whether a creation serves as a contribution to the society or not.

B. Technological Neutrality

The second principle related to the field of software copyright is the concept of technological neutrality. In general, the notion of neutrality appeals to lawmakers as it guides them in achieving fairness concerning many legal issues that requires creating a balance between competing rights.²⁹⁷ In the realm of fair use in software copyright, the doctrine does not provide a proper neutral zone between regulations set by the law and the access that the law should allow.²⁹⁸ This technological gap or the disconnection between law and technology is mainly caused by the inability to predict the progress of innovation,²⁹⁹ and this unpredictability cannot be solved by enforcing strong copyright protections as they may hinder access to new technologies.³⁰⁰ In addition, judicial inconsistency is another factor that increases the gap in

²⁹⁵ PATTERSON, *supra* note 4, at 266.

²⁹⁶ *Id.* BOWERY, *supra* note 262, at 13-14.

²⁹⁷ CARYS J. CRAIG, TECHNOLOGICAL NEUTRALITY: (PRE)SERVING THE PURPOSES OF COPYRIGHT LAW, In Michael Geist (ed.), *The Copyright Pentalogy: How the Supreme Court of Canada Shook the Foundations of Canadian Copyright*, 271 (2013).

²⁹⁸ RIMMER, *supra* note 165, at 61.

²⁹⁹ BRAD GREENBERG, RETHINKING TECHNOLOGY NEUTRALITY, 1525 (2016). See GREGORY HAGEN, TECHNOLOGICAL NEUTRALITY IN CANADIAN COPYRIGHT LAW, In Michael Geist (ed.), *The Copyright Pentalogy: How the Supreme Court of Canada Shook the Foundations of Canadian Copyright*, 324 (2013).

³⁰⁰ Samuelson, *supra* note 107, at 20.

the legal relationship between copyright owners and users as there are disputes related to similar facts that see different reasonings.³⁰¹

For instance, in *American Broadcasting Cos., Inc. v. Aereo, Inc.* (hereinafter *Aereo*),³⁰² Aereo leased a personal antenna for each subscriber that captured television broadcasts by copying the signal and sending it to the user via the internet for time-shifting purposes. The Court of Appeals for the Second Circuit, in upholding the first decision, found that Aereo did not participate in copyright infringement as its users had individual antennas for the purpose of saving the live broadcast for “private” uses.³⁰³ In addition, the Second Circuit also referred to a previous case, *Cartoon Network, LP v. CSC Holdings, Inc.*,³⁰⁴ where the Second Circuit also found that the defendant did not infringe on the plaintiff’s rights of reproduction and public performance of the broadcast.³⁰⁵ However, the Supreme Court reversed the Second Circuit’s decision in *Aereo* and found that the defendant was liable for infringement on the plaintiff’s right of public performance. The *Aereo* case is also similar to *Betamax*. Although the majority opinion concluded that Aereo does publicly perform the plaintiff’s works, contrary to *Betamax*, the dissenting opinion found otherwise. The dissenting opinion relied on the fact that Aereo does not by itself transmit data to a user unless the latter orders it to do so.³⁰⁶ In *Betamax*, a user must get the needed recording equipment in order to copy the live broadcast. Both in *Betamax* and *Aereo*, individuals must acquire the needed appliances and activate the recording process of the live broadcast by themselves.

³⁰¹ *Id.* GREENBERG, *supra* note 299, at 1537-1538.

³⁰² *American Broadcasting Cos., Inc. v. Aereo, Inc.*, 573 U.S. 431 (2014). See GREENBERG, at 1506.

³⁰³ *Id.* The Supreme Court rejected the Second Circuit’s view that “. . . Aereo does not perform publicly within the meaning of the Transmit Clause because it does not transmit ‘to the public.’ Rather, each time Aereo streams a program to a subscriber, it sends a private transmission that is available only to that subscriber”.

³⁰⁴ *Cartoon Network, LP v. CSC Holdings, Inc.*, 536 F.3d 121 (2d Cir. 2008). In this case, Cablevision allowed its subscribers to view previously recorded content by offering them a remote storage digital video recorder (RS-DVR). The RS-DVR made available by Cablevision required its subscribers to have a device that includes a hard drive in order to receive the streamed data from Cablevision’s server.

³⁰⁵ *Id.* at 139. The Second Circuit found “. . . that the transmit clause directs us to identify the potential audience of a given transmission, i.e., the persons ‘capable of receiving’ it, to determine whether that transmission is made ‘to the public.’ Because each RS-DVR playback transmission is made to a single subscriber using a single unique copy produced by that subscriber, we conclude that such transmissions are not performances “to the public,” and therefore do not infringe any exclusive right of public performance”.

³⁰⁶ *Aereo, supra* note 302. The dissenting opinion of the Supreme Court found that “Aereo offers access to an automated system consisting of routers, servers, transcoders, and dime-sized antennae. Like a photocopier or VCR, that system lies dormant until a subscriber activates it”. The opinion further reiterated that “. . . Aereo’s automated system does not relay any program, copyrighted or not, until a subscriber selects the program and tells Aereo to relay it”.

The problem of the unpredictability of technology and the inconsistency of court rulings reflect another factor that cannot be predicted which is the way users utilize technology. It is not only that lawmakers cannot foresee the future or maintain judicial reasoning, it is also difficult to assert the users' reaction toward a new technology. The problem is that the Copyright Act of 1976 aimed to be technologically neutral in the sense that it protected the authors' creations and users' interests regardless of the applied technology.³⁰⁷ For instance, in the *Napster* case, the Ninth Circuit did not take into consideration the role of technology in rendering its decision, which is P2P file sharing in this case.³⁰⁸ Rather, it just pointed out that Napster had the knowledge that the registered users were engaging in copyright infringement.³⁰⁹ In avoiding doing so, the Court of Appeals missed the opportunity to harmonize the relationship between copyright owners and users in light of a new technology.

The current type of neutrality in technological related aspects in software copyright cases is not effective enough as the legal boundaries of software copyright are gradually increasing in favor of copyright owners, which results in a disproportionate distribution of legal powers between copyright owners and users.³¹⁰ While unfortunate, such tension is not novel in the field of copyright. For instance, in the late 1800s, after the emergence of the gramophone and player piano, people used these machines to play copied music. The copyright owners of this music filed lawsuits claiming copyright infringement, but the Supreme Court found that copied piano rolls were not readable by humans, so there was no infringement when the copying of such content occurred.³¹¹ However, the copyright owners did not give up and presented their arguments in front of Congress. There they were successful as the Congress did include provisions that extended the term "copy" to "machine-readable copies" in the Copyright Act of 1909.³¹² The revising of the 1909 Copyright Act was not an isolated event as the Copyright Act of 1976 has also seen many amendments for technology-related provisions.³¹³

³⁰⁷ GREENBERG, *supra* note 299, at 1515. See TOMAS LIPINSKI, THE MYTH OF TECHNOLOGICAL NEUTRALITY IN COPYRIGHT AND THE RIGHTS OF INSTITUTIONAL USERS: RECENT LEGAL CHALLENGES TO THE INFORMATION ORGANIZATION AS MEDIATOR AND THE IMPACT OF THE DMCA, WIPO, AND TEACH, 825 (2003).

³⁰⁸ *Id.* LIPINSKI, at 826.

³⁰⁹ *Napster*, *supra* note 28 at 1021. The Ninth Circuit stated that ". . . [r]egardless of the number of Napster's infringing versus noninfringing uses, the evidentiary record here supported the district court's finding that plaintiffs would likely prevail in establishing that Napster knew or had reason to know of its users' infringement of plaintiffs copyrights".

³¹⁰ LIPINSKI, *supra* note 307, at 834.

³¹¹ GREENBERG, *supra* note 299, at 1505-1506.

³¹² *Id.*

³¹³ *Id.* at 1519. Greenberg mentioned that the Copyright Act of 1976 was revised thirty-one times just for issues related to technology.

In addition, there is also the enactment of the DMCA, which is a regulation related to technological aspects.³¹⁴ However, the over-adoption of specific rules related to technology can result in more legal complexities in software copyright as a certain technology that is currently regulated may be followed by another one in the future that cannot be governed by the current rules.³¹⁵ Therefore, technological neutrality is best handled as an explicit part of the balancing between authors and users, not just as an interpretative principle.³¹⁶ This prompts courts to take the initiative in addressing the technological challenges in claims of infringement on the spot instead of waiting for a legislative intervention. It also minimizes the delays and the consequences of not dealing with such challenges as early as possible.

In Canada, the principle of technological neutrality is also receiving major attention.³¹⁷ It is described as a principle “that avoids imposing an additional layer of protections and fees based solely on the method of delivery of the work to the end user.”³¹⁸ In *ESA*,³¹⁹ the plaintiff demanded royalties for songs that were included in video games sold to users as they keep a copy of these songs on their devices, even though the publishers of the video games had already licensed these songs. The Supreme Court of Canada found that users who obtained these songs through the purchase of the video games were not liable for unlawful copying as the principle of technological neutrality allows for the production or reproduction of a work in any form.³²⁰ In addition, the Court stated that “[t]he Internet is simply a technological taxi that delivers a durable copy of the same work to the end user.”³²¹ Thus, users should not be required to pay for content delivery made through certain technology.

If copyright owners have managed to impose extra layers of restrictions, they will not be able to counter technological progress as copying attempts will always find their way around these

³¹⁴ LIPINSKI, *supra* note 307, at 827.

³¹⁵ GREENBERG, *supra* note 299, at 1512-1513.

³¹⁶ CRAIG, *supra* note 297, at 272.

³¹⁷ *Id.* at 298.

³¹⁸ *ESA*, *supra* note 26, at ¶ 9. See SAMUEL TROSOV, FAIR DEALING PRACTICES IN THE POST-SECONDARY EDUCATION SECTOR AFTER THE PENTALOGY, In Michael Geist (ed.), *The Copyright Pentalogy: How the Supreme Court of Canada Shook the Foundations of Canadian Copyright*, 223 (2013).

³¹⁹ *Id.* See HAGEN, *supra* note 299, at 315-316.

³²⁰ *Id.* at ¶ 5. The Supreme Court stated that “[t]he principle of technological neutrality . . . describes a right to produce or reproduce a work ‘in any material form whatever’ . . . there is no practical difference between buying a durable copy of the work in a store, receiving a copy in the mail, or downloading an identical copy using the Internet. The Internet is simply a technological taxi that delivers a durable copy of the same work to the end user”.

³²¹ *Id.*

restrictions.³²² Therefore, copyright should be looked upon as a system that is crafted to foster creativity and the interactions of intellectual skills between community members.³²³ The *ESA* case is a good example of the application of technological neutrality to the facts of a case. Neutrality does not mean non-interference with either the plaintiff or defendant's conduct, rather, it is to show a non-bias towards a particular method of delivery. Technological neutrality should ideally be applied in a manner that favors neither plaintiffs nor defendants as its purpose is to assure that copyright laws are interpreted in a way "that avoids imposing an additional layer of protections and fees based solely on the method of delivery of the work to the end user". By analogy, users should also refrain from using technology in a way that negatively impacts the process of dissemination or acquiring revenues over content that belong to the copyright owners. Therefore, the principle of technological neutrality can assist courts in the balancing process between copyright owners and users in order to determine whether either of them has employed technology to harm the other's interests.

C. Proportionality

The third and final concept in addressing the issue of software copyright is proportionality. Although there is no explicit application of proportionality in copyright lawsuits, certain cases may provide an indication of adopting a proportionality analysis in claims of copyright infringement. Throughout the past years, the concept of proportionality has become increasingly popular within various legal fields. Generally, the doctrine of proportionality emerged more than a hundred years ago.³²⁴ Its first use can be traced back to the 1882 Prussian

³²² WALTER PFORZHEIMER, *HISTORICAL PERSPECTIVE ON COPYRIGHT LAW AND FAIR USE*, Columbia University Press, 33 (1941). PFORZHEIMER stated that "[t]he wheels of science, technology, and progress cannot be halted. To attempt to halt them by restricting the flow of information through the drafting of an archaic copyright revision is folly akin only to King Canute's attempts to stem the tides". Although there are disagreements about the accuracy of King Canute's story in standing in front the tides thinking that he could stop them, the point that the author raises is that no matter how many obstacles are imposed on technology in order to control users' behavior, these obstacles will not make the situation any better, and it may even make it worse.

³²³ NATHAN BURKAN, *COPYRIGHT LAW SYMPOSIUM NUMBER FIVE*, Columbia University Press, xi (1954). The author made a very inspiring statement: "[t]he laws of copyright are designed to stimulate the communication of thoughts, sentiments and emotions in the public interest".

³²⁴ CARMEN LOPEZ ET. AL, *PROPORTIONALITY IN INVESTMENT TREATY ARBITRATION AND BEYOND: AN "IRRESISTIBLE ATTRACTION"?*, 2 (2015). The authors also described the doctrine of proportionality "as old as the code of Hammurabi", which is one of the first written codes of law that dates to 1772 BC in Babylonia. Although the article is related to investor-state dispute settlement, the important point raised here is that proportionality is used when there is a difficult balancing between two competing, and not necessarily evil, interests. In cases of investor-state dispute settlement, such balancing arises when a state preforms an indirect expropriation or exploitation to the investment or property of the investor. The state seeks to maintain the public benefit and the investor wants to protect the investment. Both interests are fair, but conflicted. Such cases require a legal tool that can strike that balance in order for tribunals to determine the involved stakes of favoring party over

administrative law. It was aimed at restricting the police power doctrine at that time.³²⁵ Later, the doctrine of proportionality began to be transferred from Germany's administrative law to its constitutional law and expanded further into other states' regulations, especially within Europe.³²⁶

In a more recent era, the European Court of Justice (ECJ) and European Court of Human Rights (ECHR) adopted proportionality in 1970 and 1976 respectively. It was further implemented after the fall of the Soviet Bloc in the 1990s within the new constitutions of Albania, Moldova, and Romania.³²⁷ The doctrine of proportionality became a viral legal standard that then spread from Europe to many other countries on different continents. Therefore, proportionality is not limited to a certain law or to a certain state as it is a transplant from domestic law to international law and, most recently, to treaties. Although the implementation of proportionality in copyright cases is not yet clear, it still holds an "irresistible attraction".³²⁸ Proportionality is usually composed of one or more of these factors: legitimacy, suitability, necessity, and proportionality *stricto sensu*. Proportionality is also referenced by other terms, such as the balancing test, intermediate scrutiny, and reasonableness,³²⁹ with all serving the same purpose.

Currently, the role of proportionality in software copyright is not yet clear. However, certain theories link proportionality to website blocking injunctions to prevent copyright infringement.³³⁰ The implicit aspect of proportionality in cases of website blocking injunctions appear when courts measure the reasonableness of the infringement act compared to the penalty.³³¹ For instance, in *Scarlet Extended SA v Société Belge des auteurs, Compositeurs et*

the other, which is proportionality. Similarly, users want to have a free flow of accessing knowledge and information, while copyright owners seek to obtain the revenues of their works. Therefore, this type of conflicted interests is a lot more susceptible to require proportionality while conducting the balancing process due to its specialized character in striking such difficult balance.

³²⁵ *Id.*

³²⁶ *Id.*

³²⁷ *Id.* 2-3.

³²⁸ *Id.* 1. Mary Arden from the English Court of Appeal described proportionality as that "[n]o-one can possibly quarrel with the basic idea of proportionality as a legal concept . . . The logic of the proportionality principle is impeccable. Its attraction is irresistible".

³²⁹ *Id.* at 1. See generally BENEDIKT PIRKER, PROPORTIONALITY ANALYSIS AND MODELS OF JUDICIAL REVIEW, 14 (2013).

³³⁰ DAVID LINDSAY, WEBSITE BLOCKING INJUNCTIONS TO PREVENT COPYRIGHT INFRINGEMENTS: PROPORTIONALITY AND EFFECTIVENESS, 40 U.N.S.W.L.J. 1507, 1508-1509 (2017). PEKKA SAVOLA, PROPORTIONALITY OF WEBSITE BLOCKING: INTERNET CONNECTIVITY PROVIDERS AS COPYRIGHT ENFORCERS, 5 J. Intell. Prop. Info. Tech. & Elec. Com. L. 116, 116 (2014).

³³¹ *Id.*

*Editeurs SCRL*³³² (*SABAM*), the CJEU held that enforcing a filtering system that monitors all the information related to consumers to prevent future infringements is a complicated and expensive measure that is not balanced towards protecting IP rights.³³³ One can infer from this court ruling that protecting IP rights should be proportionate to the party's interests.³³⁴

In Canada, the Supreme Court has not followed a strict proportionality approach, but it has started to explicitly apply the standard of reasonableness in decisions of the Copyright Board in copyright cases,³³⁵ which was referred to in the case of Google thumbnails in the German judiciary discussed in the previous chapter. Generally, the Supreme Court reviews the Board's decisions in order to check whether they meet the purpose of the statutes and the interpretations of the reviewing courts.³³⁶

In *Alberta (Education) v Canadian Copyright Licensing Agency (Access Copyright)*, 2012 SCC 37 (hereinafter *Alberta*),³³⁷ the Board found that the act of teachers who photocopied short excerpts from textbooks for their students for research and study purposes was not fair. The Federal Court of Appeal upheld the Board's decision and the case then moved to the Canadian Supreme Court, which decided that the Board's decision was unreasonable.³³⁸ The Court found that the Board's consideration of the separation between teachers and students' purpose was unreasonable as both a teacher and students share the same ultimate goal, which is conducting "research/private study."³³⁹ In addition, the Court found that it was unreasonable for the Board

³³² *Scarlet Extended SA v Societe Belge des Auteurs, Compositeurs et Editeurs SCRL (SABAM)*, (C-70/10) [2011] E.C.R. I-11959 (24 November 2011). See SAVOLA, *supra* note 330, at 120.

³³³ *Id.* at ¶ 36. The CJEU was asked by Brussels Court of Appeals to determine whether "... a national court ... [should] apply the principle of proportionality when deciding on the effectiveness and dissuasive effect of the measure sought ...". The CJEU found that "... a general monitoring obligation would be incompatible with Article 3 of Directive 2004/48, which states that the measures referred to by the directive must be fair and proportionate and must not be excessively costly" and concluded that "... a fair balance [must] be struck between the right to intellectual property, on the one hand, and the freedom to conduct business, the right to protection of personal data and the freedom to receive or impart information, on the other". At ¶ 53.

³³⁴ SAVOLA, *supra* note 330, at 120.

³³⁵ REYNOLDS, *supra* note 225, at 12-13.

³³⁶ *Id.*

³³⁷ *Alberta (Education) v Canadian Copyright Licensing Agency (Access Copyright)*, 2012 SCC 37. See *id.* at 17.

³³⁸ *Id.* at ¶ 37. The majority opinion of the Canadian Supreme Court concluded that "... the Board's decision as to whether the photocopies amount to fair dealing is to be reviewed, as it was by the Federal Court of Appeal, on a reasonableness standard. Because the Board's finding of unfairness was based on what was ... a misapplication of the CCH factors, its outcome was rendered unreasonable".

³³⁹ *Id.* at ¶ 23. The Court stated that "... there is no such separate purpose on the part of the teacher. Teachers have no ulterior motive when providing copies to students. Nor can teachers be characterized as having the completely separate purpose of 'instruction'; they are there to facilitate the students' research and private study ... the teacher's purpose in providing copies is to enable the students to have the material they need for the purpose of studying. The teacher/copier therefore shares a symbiotic purpose with the student/user who is engaging in research or private study".

to check the relation of all the copied excerpts to the work as a whole in order to determine whether the copying was done in fair dealing.³⁴⁰ This is because the amount of the dealing factor is not a quantitative assessment, rather, it looks at the relativity between the copied parts and the entirety of the original work.³⁴¹ Moreover, the Court stated that the Board's finding an alternative to the dealing in buying books for each student, instead of copying short excerpts, is not a reasonable alternative.³⁴² It is also worth mentioning that buying the original textbooks is not an alternative *per se*, rather, it is the main option to obtain the excerpts, not an alternate choice. Lastly, the Court found that there was no evidence that proved the decline in textbook sales due to the photocopying act, especially that copies were only short excerpts.³⁴³ Thus, the Court concluded that the Board's application of the fair dealing factor was unreasonable.

There was also a consideration of proportionality, though tacitly, in the application of the US fair use model. As previously discussed, the Ninth Circuit, in its decisions in both *Bleem*³⁴⁴ and *Connectix*,³⁴⁵ relied on equally weighing the financial harm inflicted on Sony with the public benefit resulting from the services provided by Bleem and Connectix in offering rational purchases and maintaining "public access to the ideas and functional elements embedded in copyrighted computer software programs."³⁴⁶ This rationale was adopted in the fourth and last factor of the test, which matches the sequence of the proportionality analysis in conducting the proportionality in its strict sense as a last step in the balancing process.

A reasonableness standard requires courts to adopt a rational analysis to determine whether the contested act is made through rational conduct.³⁴⁷ On the other hand, proportionality situates a court in a position that requires them to weigh between two contested stances with one of them

³⁴⁰ *Id.* at ¶ 29. The Court mentioned that ". . . the 'amount' factor is not a quantitative assessment based on aggregate use, it is an examination of the proportion between the excerpted copy and the entire work, not the overall quantity of what is disseminated".

³⁴¹ *Id.*

³⁴² *Id.* at ¶ 32. The Court found that ". . . buying books for each student is not a realistic alternative to teachers copying short excerpts to supplement student textbooks . . . purchasing a greater number of original textbooks to distribute to students is unreasonable in light of the Board's finding that teachers only photocopy short excerpts to complement existing textbooks . . . Copying short excerpts, as a result, is reasonably necessary to achieve the ultimate purpose of the students' research and private study".

³⁴³ *Id.* at ¶ 36. The Court stated that ". . . it is difficult to see how the teachers' copying competes with the market for textbooks, given the Board's finding that the teachers' copying was limited to short excerpts of complementary texts. If such photocopying did not take place, it is more likely that students would simply go without the supplementary information, or be forced to consult the single copy already owned by the school".

³⁴⁴ *Bleem*, *supra* note 221.

³⁴⁵ *Connectix*, *supra* note 224.

³⁴⁶ *Id.* ¶ 25.

³⁴⁷ ALEC SWEET, PROPORTIONALITY BALANCING AND GLOBAL CONSTITUTIONALISM, 78 (2008).

suffering the consequences depending on the court's decision.³⁴⁸ This is an important advantage in proportionality as it constantly alerts the courts that there will be losses and they have to realize what is truly at stake in order to determine the decision that will lead to the least possible damages. Proportionality is a concept that has seen many applications in different jurisdictions. It plays a prominent role in disputes of conflicted rights, such as constitutional norms, and balancing between unlawful acts and penalties.³⁴⁹ When seen through the lens of software copyright, proportionality appears as a strong candidate for achieving the difficult task of measuring the inflicted harm on the copyright owners compared to the public interest through the users' copying acts and the determination of penalties will be less exaggerating.

In conclusion, the discussed principles in this chapter – originality, technological neutrality, and proportionality – provide an indicator towards the possible remedies of the disadvantages in the principle of fair use/dealing. The next chapter will present the argument of this paper in order to find a balanced mechanism to be applied in cases of software copyright.

³⁴⁸ *Id.* at 89. See VICKI JACKSON, CONSTITUTIONAL LAW IN AN AGE OF PROPORTIONALITY, 124 Yale L.J., 3116-3117 (2015). Proportionality is similar to what is known in the US legal system as “strict scrutiny” analysis. However, the strict scrutiny test is less rigorous than proportionality in its strict sense as only the latter “takes full account of the ‘severity of the deleterious effects of a measure on individuals or groups’”.

³⁴⁹ *Id.* at 3098-3099. In this part of the article, Jackson discusses the aspects of proportionality in the US constitution, and she stated that the role of proportionality, as a goal constitutional government, is to assure “. . . that larger harms imposed by government should be justified by more weighty reasons and that more severe transgressions of the law be more harshly sanctioned than less severe ones”.

V. A Shift in Perspective

The conflict of interests between copyright owners and users requires a different approach that considers all the aspects related to owners' and users' rights within the context of software copying, and at the same time, preserves the purpose of copyright. Such change of perspective lead Patterson to argue that fair use as a concept should be applied to the author's use of work, not to limit the consumers' use of content.³⁵⁰ His reasoning is that when authors create something, they copy the work of other authors, so fair use should be applied to the plaintiffs to determine whether their work deserves to be immune from copying or not.³⁵¹ However, if fair use, in its entirety, is shifted from being a defense for users to the copyright owner's use of content, it would render the users defenseless.³⁵² This is especially true because copyright owners' rights are well defined in copyright statutes, while users' interests are not as clear compared to copyright owners.³⁵³

The difference between each copyst is that one receives a copyright, while the other enjoys fair use/fair dealing. The former is entitled to receive a profit and the latter to apply fair use/fair dealing with a duty to reward the authors for their contributions. However, the duty of the author is missing from this relationship. Consequently, it is also missing from the balancing process altogether. There is an argument that proposes that copyright is, in part, a set of privileges, so in Hohfeld's perspective the correlative of a privilege is no-right, which makes copyright owners dutyless in relation to users when it comes to their exclusive rights.³⁵⁴ However, when the Statute of Anne was enacted, publishers, who also own copyright, were responsible for distributing nine free copies of the publication to university libraries, and the non-execution of this distribution resulted in an imposition of penalties on them.³⁵⁵ In addition,

³⁵⁰ PATTERSON, *supra* note 4, at 266.

³⁵¹ *Id.*

³⁵² KATHY BOWREY, ON CLARIFYING THE ROLE OF ORIGINALITY AND FAIR USE IN 19TH CENTURY UK JURISPRUDENCE: APPRECIATING "THE HUMBLE GREY WHICH EMERGES AS THE RESULT OF LONG CONTROVERSY", 13-14 (2010).

³⁵³ SEPEHR SHAHSHAHANI, THE NIRVANA FALLACY IN FAIR USE REFORM, 16 *Minn. J.L. Sci. & Tech.* 273, 293 (2015).

³⁵⁴ DAVID JOHNSTONE, DEBUNKING FAIR USE RIGHTS AND COPYDUTY UNDER U.S. COPYRIGHT LAW, 52 *J. Copyright Soc'y U.S.A.* 345, 366-367 (2005).

³⁵⁵ DAVID VAVER, COPYRIGHT AND THE INTERNET: FROM OWNER RIGHTS AND USER DUTIES TO USER RIGHTS AND OWNER DUTIES, 57 *Case W. Res. L. Rev.* 731, 749 (2007) *available at* <https://scholarlycommons.law.case.edu/caselrev/vol57/iss4/4>. See HAOCHEN SUN, FAIR USE AS A COLLECTIVE USER RIGHT, 90, 125 (2011). PATTERSON, *supra* note 4, at 266. See GEIST, *supra* note 26. Geist mentioned that the Canadian courts in 2004 started to address fair dealing as a user's right in order to create a balance between users and creators' interests, which indicates that courts can reconsider the balancing process in a way that

publishers were obligated to maintain reasonable pricing.³⁵⁶ Furthermore, one can infer from cases like *Connectix* and *Sega* that the Ninth Circuit found that both Sony and Sega went beyond their entitlements due to their monopolizing strategies, which can indicate that copyright owners have a certain level of responsibility that should not be exceeded towards the community at large. Therefore, the idea of a “copy-duty” is not a fiction.³⁵⁷

There are also other observations that courts can, and should, consider while conducting the balancing process. For instance, by looking at Article 27 of the Universal Declaration of Human Rights the reciprocal rights and duties of users and authors become clear: “[e]veryone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits”, and “that [e]veryone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.”³⁵⁸ One sees the correlation between the two parts of the Article as duty is embedded in both. First, people’s right of free participation is followed with a duty to properly reward the authors in respect to their material rights and to protect their integrity.³⁵⁹ Second, the right of authors to receive the attribution and fruits of their labor is coupled with a duty not to impede the participation of the public in sharing the results of the work.³⁶⁰

The current fair use test or its derivative, fair dealing and EPU, does not address the authors’ conduct. In addition, the test does not reflect the purpose of copyright in the “encouragement of learning”³⁶¹ or to “promote the progress of science and useful arts”³⁶² or “to promote technological innovation” and “the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge”, which should be exercised “in a manner conducive to social and economic welfare, and to a balance of rights and obligations.”³⁶³ Allocating the objectives of the doctrine is the most important consideration

observe the copyright owners’ due diligence. See LAYMAN PATTERSON, COPYRIGHT IN HISTORICAL PERSPECTIVE, 228 (1968).

³⁵⁶ *Id.*

³⁵⁷ LESSIG, *supra* note 84, at 175.

³⁵⁸ United Nations, *Universal Declaration of Human Rights*, Article 27, available at <https://www.un.org/en/universal-declaration-human-rights/>.

³⁵⁹ See also FISHER, *supra* note 34, at 1690.

³⁶⁰ See LESSIG, *supra* note 84, at 175.

³⁶¹ Title of the Statute of Anne.

³⁶² The Copyright Clause of the US constitution.

³⁶³ Article 7 of the TRIPS agreement.

when applying the test.³⁶⁴ In addition, substituting the drawbacks of the fair use/dealing factors with other advantages from different, yet contextually related, principles will provide courts a stable framework that they can rely on when examining cases related to software copyright. Although principles, such as originality, can have major shortcomings, reconsidering the current fair use/dealing factors in the light of these principles can aid courts to continue where these principles left off during their fairness analysis. This chapter looks at the connection between copyright theories and the application of fair use/dealing in courts of law regarding cases of software copyright. Afterwards, the chapter presents a different approach to address cases of software copyright based on the findings of this paper. In addition, the proposed approach in this chapter is applied on the *Napster* case as an example of the way it could be adopted with. Finally, the chapter closes with possible concerns of the proposed approach and the way to address them.

A. Identifying a Different Approach

Finding a way to reflect the four theories of property protection in the fair use/dealing principle can help in creating a mechanism that captures their common objectives within the context of software copyright.³⁶⁵ Balancing between two conflicted interests in software copyright cases requires a mechanism that can withstand the rapid change of the system of software copyright in order to maintain its reliability in the long term.

First, there is the social welfare objective which aims at ensuring a wide distribution of protected works while also maintaining sufficient incentive for the authors.³⁶⁶ The social welfare consideration is essential for courts when applying the fair test, especially in the US.³⁶⁷ However, none of the factors provide an indication whether a proper incentive is given or that wide dissemination has been made.³⁶⁸ The purpose, commercial or noncommercial, and character of the use, transformative or not, nature of the copyrighted work, whether unpublished or creative work, and the quantity and importance of the used material do not

³⁶⁴ FISHER, *supra* note 34, at 1687.

³⁶⁵ See also WENDY GORDON, FAIR USE AS MARKET FAILURE: A STRUCTURAL AND ECONOMIC ANALYSIS OF THE BETAMAX CASE AND ITS PREDECESSORS, 82 Colum. L. Rev. 1600, 1604 (1982). Although Gordon argues for an economic analysis, the point is that she also argues that there are underlying objectives of the fair use doctrine that should be highlighted in order to have a coherent application of the test. Thus, highlighting the main goals of copyright theories can provide some guidance to a sustainable framework for courts to follow in their application of fair use/dealing.

³⁶⁶ *Id.*

³⁶⁷ *Id.*

³⁶⁸ *Id.* at 1691.

reflect the proper incentive and the wide distribution of the utilitarian approach. Even the alternative to the dealing as seen in the Canadian model, does not help either as it simply looks into whether there is some other unprotected content that could serve the needs of the defendant. As for the effect of use upon the potential market or value of the copyrighted work, it can be connected to the incentive of the author, but it still does not directly indicate what constitutes sufficient incentive or how copying may infringe his or her rights, especially that the Canadian Supreme Court realized, while reviewing the Board's decision in *Alberta*, that the impact of making photocopies is "impossible to quantify."³⁶⁹

The second theme is related to the Lockean theory of the natural right in obtaining the fruits of labor. The difficulties in applying the Lockean approach to the fairness test is also similar to the utilitarian one, especially that Locke refers to the one who exhibits labor as a person, not an author, so it could also refer to copyists who make transformative works as well.

The third theme, which is the personality approach, mainly focuses on the personal bond between the content and its creator, so from this perspective copyright should be used to maximize the interests of authors.³⁷⁰ The only factor that may relate to this approach is the nature of the copyrighted work, especially in cases of unpublished content like in *Harper*.³⁷¹ In addition, the EPU's can also reflect the purpose of this approach as it limits copying attempts within a fixed list of exceptions in order to protect the rights of the authors as best as possible.

The fourth and final approach is the one related to maintaining an attractive culture by taking into consideration the frequent and benevolent habits of a community in determining the fairness of copying acts.³⁷² However, combining this approach with any of the other factors is very difficult as none of them reflect the cultural aspect within a community, not to mention that it is not an easy task to identify what the usual behavior of consumers is and also to determine whether these activities are decent or not.

The generality of the theories' objectives combined with the insufficient guidance of the fair use/fair dealing test complicates the situation for courts when integrating these objectives with the factors of the test to arrive at a more unified and fair system.³⁷³ In addition, and most

³⁶⁹ *Alberta*, *supra* note 337, at ¶ 34.

³⁷⁰ *Id.* at 1692.

³⁷¹ *Harper supra* note 49.

³⁷² FISHER, *supra* note 34, at 1691.

³⁷³ *Id.* 1691-1692.

importantly, the factors do not reflect the goals of copyright regulation which are the promotion of knowledge and information and the wide dissemination of the content. Furthermore, the increased gravity of legal remedies in claims of copyright infringement makes the defendant reluctant to opt for the fair use/dealing defense as it will not do any good in the face of the severe consequences of such lawsuits.

By relying on other potential principles, namely originality, technological neutrality, and proportionality, there could be a multiple-stage analysis that give courts the opportunity to examine each party's conduct one at a time so that they can fully capture the stakes behind the actions of both the plaintiff and the defendant. Then, courts could proceed to a neutral stage that actively identify and evaluate both parties' interests and responsibilities so that they can determine which party should prevail. Therefore, a shift in perspective is required in order to reach a mechanism that is able to detect how the promotion of creative works can be properly achieved under claims of fair use/fair dealing.

B. The Three-Phase Approach

As explained earlier, the fair use/fair dealing factors do not address the purpose of copyright laws. EPU is a very rigid concept that cannot be adapted to conflicting interests. However, it is important to maintain the purpose of copyright and the related theories within changed circumstances.³⁷⁴ In 1928, the US Supreme Court found that the government's wiretapping without a warrant does not constitute a violation of the constitutional right of privacy as there was no real trespass of the premises of the plaintiff's house.³⁷⁵ A dissenting opinion decided otherwise. It found that the role of courts is to apply the rules in a way that maintain their purpose in any given circumstance.³⁷⁶ The dissenting opinion contended that when the framers wrote about privacy rights, trespass was the "technology for invading privacy,"³⁷⁷ but times have changed and the invasion of privacy can take many forms without physically invading someone's privacy, such as through wiretapping.³⁷⁸ It is the task of judges to not be constrained

³⁷⁴ See LESSIG, *supra* note 70, at 161.

³⁷⁵ *Id.*

³⁷⁶ *Id.*

³⁷⁷ *Id.*

³⁷⁸ *Id.*

by the language of copyright statutes in order to reach the needed principles that can make the copyright system work for everyone.³⁷⁹

Shifting to a different perspective, one finds that there are many forms of promoting and distributing copyrighted content that did not exist when copyright laws were written. In addition, there are now many forms of usage that also did not exist before, so it is important to look at the current ways of sharing not to further restrain attempts of copying, but rather, to understand how these activities can advance both the interests of copyright owners and users in order to preserve the objectives of fairness in software copyright. Consequently, the balancing process should explicitly include factors that weigh the interests of both copyright owners and users. Therefore, in software copyright cases, the focus should be on the extent of fairness in either enforcing an author's right or legitimizing a user's copying act.

C. Roadmap of the Three-Phase Approach and its Benefits

The three-phase approach is comprised of three stages which are applied together that ultimately determine the extent of fairness in favoring either the private interests of copyright owners or the public benefit resulting from the defendant's copying act. The first stage is to check the level of transformativeness of the use. The aim of this test is to determine whether the use has a minimal level of transformativeness. The purpose of this stage is to maintain the aspect of thriving culture through encouraging users to be creative even in the modest of ways. In addition, it is to allow users to create their own personal bond with the content they use through the demonstration of their own intellectual skills in their act of labor.

In the second stage, the court would determine the contribution of content and alternate modes of dissemination. The aim of the second stage is to determine whether the copyright owners have properly promoted and distributed their content by showing "meaningful work"³⁸⁰ that is published as widely as possible. This stage also focuses on the personal bond in the relation between the creators and their act of labor or content. The contribution factor is not to prove the content's novelty or originality's independent creation and modicum of creativity, rather, it is to show the meaningfulness of the work through the authors' purpose behind their creations.³⁸¹ Identifying a purpose of creation is an important step in encouraging creators to

³⁷⁹ PATTERSON, *supra* note 4, at 229. MULLIGAN, *supra* note 35.

³⁸⁰ FISHER, *supra* note 34, at 1746-1747.

³⁸¹ See GORDON, *supra* note 47, at 1547-1548.

strengthen the personal bonds with their works because creating content without having a clear purpose can slow the production of new content. In the case of works that do not reflect a personal bond or a clear purpose, copying may reinvigorate such creations in order to keep them active and not forgotten so that a community can maintain a prospering culture. Second, the factor of alternate modes of dissemination is aimed at preserving social welfare through ensuring the widest possible distribution of copyrighted content so that a society will not be isolated from authors' creations and to have a wide array of accessing options. This factor examines the protected content level of accessibility, so if the content is proved to be relatively easy to obtain, then the copying act may be considered as an infringement. However, if the content is available through limited means, then the copying act may be considered as fair use.

The third and final stage is composed of two additional factors which are technological neutrality and proportionality *stricto sensu*. These two factors favor neither of the parties as their objective is to balance between them. First, technological neutrality is employed to investigate whether the copyright owners have used technology to impose extra measures for accessing or using the content such as in the *ESA* case, or that users are taking advantage of technology to disrupt distribution plans, harm the personal bond or to avoid providing incentives to creators, such as exploiting a technological flaw in obtaining copyrighted content without rewarding its creators.³⁸² For example, Electronic Arts, a video games publisher, encountered a flaw in its store system that allowed users to use discount coupons indefinitely, which many users did and obtained many games by taking advantage of a technological flaw. In this incident, users engaged in a direct infringement through the exploitation of an unfair technological advantage. Technological neutrality should take an extra step in ensuring the proper dissemination of the copyrighted content. At the same time, it seeks to guarantee that users are not utilizing technology to prevent rewarding creators the fruits of their labor. Second, proportionality in its strict sense is applied in order to weigh between the inflicted harm on the plaintiffs compared to protecting the public interest through the users' copying acts.³⁸³ In addition, it determines the proportionate remedy based on the outcome of the case. This stage attempts to achieve an absolute balance between copyright owners and users.

³⁸² Erik Kain, *EA Accidentally Gives Away Free Games With Origin Store Coupon Glitch*, available at <https://www.forbes.com/sites/erikkain/2012/10/14/ea-accidentally-gives-away-free-games-with-origin-store-coupon-glitch/#3389dad31fae>.

³⁸³ See GORDON, *supra* note 365, at 1619-1620.

1. First Stage of the Three-Phase Approach: Transformativeness

The first factor in the three-phase approach is transformativeness. If minimal creativity is sufficient to obtain a copyright protection, then it should also be enough for a copyst to show a minimum level of transformativeness in his/her use in order to be considered as fair. One of the most, if not only, decisive factors in cases of software copyright is whether the copying act is transformative.³⁸⁴ The reason is that transformative use shows a certain level of creativity of a user. It encourages users to become more active within a community,³⁸⁵ which is similar to what Lord Hardwicke in *Gyles* stated that as long as copied content is not “colourably shortened”, then “abridgments may with great propriety be called a new book, because . . . the invention, learning, and judgment of the [secondary] author is shewn in them,” which can relate to the condition of the use having some level of transformativeness. In this first stage, a court would examine the transformative use of the defendant, while the latter needs to demonstrate the transformative aspect of his/her use.

This draws upon the approach of the US Court of Appeals for the Third Circuit regarding the qualification of derivative works to copyright protection, so not just to be considered as fair use/dealing, that it should require, similar to the originality test, “some minimal degree of creativity.”³⁸⁶ By applying the same rationale to transformativeness, considering a use or dealing to be fair should also require a low level of creativity. The reason is that granting copyright protection for derivative uses has a much higher value compared to finding them as fair, so requiring a low level of creativity in obtaining copyright protection while not doing so in considering the transformative character in fairness claims is disproportionate. Therefore, both transformativeness and originality should equally require a low threshold of creativity. It is even more convenient that transformativeness should require a lower or simplified threshold of creativity as the claim in this case is related to a fairness claim, which has a lower legal value compared to granting a copyright protection for similarly low value creative works.

³⁸⁴ See FISHER, *supra* note 34, at 1768.

³⁸⁵ *Id.*

³⁸⁶ *Dam Things From Denmark v. Russ Berrie & Co.*, 173 F. Supp. 2d 277 (D.N.J. 2001). The Court of Appeals for the Third Circuit stated regarding derivative works that “[i]n considering the originality required to qualify for copyright protection as a derivative work, the Supreme Court has explained: ‘To qualify for copyright protection, a work must be original to the author. Original, as the term is used in copyright, means only that the work was independently created by the author (as opposed to copied from other works), and that it possesses at least some minimal degree of creativity’”.

2. Second Stage of the Three-Phase Approach: Promotion and Dissemination

The second stage of the three-phase approach consists of two steps that concern the promotion and dissemination of copyrighted content. The first step is contribution. Here, plaintiffs must demonstrate the meaningfulness aspect of the claimed content towards their recipients. The second step is alternate modes of dissemination. It aims to identify whether the copyright owner has viable alternate measures to distribute the content to the public.³⁸⁷ This step should not be confused with the alternative to the dealing factor from the Canadian fair dealing model.

a. Contribution

The main difference between fair use and copyright infringement is the equilibrium of what the author dedicates to the society compared to his/her fruits of labor in order to determine the fairness of copying acts in relation to the public.³⁸⁸ In addition, copyright grants the creator certain exclusive rights, which are not perpetual, and given in exchange for a dedication.³⁸⁹ In this way originality is a mandatory step to obtain a copyright, but to measure the significance of this originality on a community is something else entirely. For example, in a song called Hotel California performed by the Eagles, the band told a story of “materialism and excess” in American culture.³⁹⁰ Such work reflects a personal bond between the band and its song that makes it a clear contribution to their audience.

A society expects a contribution in exchange for a reward, so if there are copying attempts without reward to the author, then courts should be prompted to examine the purpose of the plaintiff’s work dedicated to consumers. Thus, the plaintiff should demonstrate the “meaningful” aspect of the work.³⁹¹

³⁸⁷ FISHER, *supra* note 34, at 1774.

³⁸⁸ WALTER PFORZHEIMER, HISTORICAL PERSPECTIVE ON COPYRIGHT LAW AND FAIR USE, Columbia University Press, 30 (1941). Pforzheimer mentioned professor Ralph R. Shaw’s statement in his book Library Property in the United States which said that “[t]he differentiation between fair use and infringement is fundamentally a problem of balancing what the author must dedicate to society in return for his statutory copyright – which varies according to the work involved – against undue appropriation of what society has promised the author in terms of protection of his exclusive right . . . fair use is all use dedicated to the public by the nature of statutory copyright”.

³⁸⁹ *Id.* at 28. Judge Learned Hand stated that “[c]opyright in any form, whether statutory or at common law, is a monopoly; it consists only in the power to prevent others from reproducing the copyrighted work . . . Congress has created the monopoly in exchange for a dedication, and when the monopoly expires the dedication must be complete”.

³⁹⁰ Songfacts, *Hotel California by Eagles*, available at <https://www.songfacts.com/facts/eagles/hotel-california>.

³⁹¹ FISHER, *supra* note 34, at 1746-1747.

b. Alternate Modes of Dissemination

After the first step, the court moves to examine whether the plaintiff has a viable and widely used alternate mode of dissemination.³⁹² The purpose of this step is to examine whether the plaintiff has provided a distribution method that can be easily accessed. If the plaintiff's distribution system offers versatility in accessing the content, then this step will most likely favor the plaintiff. However, if the plaintiff had an alternate mode of distribution that could have been easily adopted, then this step will probably not be in favor of the plaintiff.

This approach is more efficient than the fair dealing requirement of alternatives to the dealing as it provides a manageable criterion for courts to determine whether the plaintiffs have done their part as best as possible in encouraging users to obtain the protected works through multiple channels, which is easier and more accurate compared to finding a substitute for the copyrighted work that could meet the needs of the defendant.

3. Third Stage of the Three-Phase Approach: Active Balance

The last stage is based on actively balancing between the interests of copyright owners and users. The aim of this phase is to examine both sides of the case and to determine which side has an excess of advantages and to recalibrate this superiority in favor of the other party in order to achieve a proper balance between the plaintiff and the defendant. The first step in this stage is technological neutrality which aims to confirm whether the plaintiff has used technology to facilitate or impede the defendant's access to the content and if the defendant has employed technology to avoid paying the cost of using the work or to damage the process of dissemination.³⁹³ The second and final step is proportionality *stricto sensu*. The last step is for both facts and remedies of the judgment.

This step examines whether the effect of the copying act on the plaintiff's rights justifies achieving a public interest through the defendant's act or not. The consideration of a public interest comes from the fact that for many consumers in various cultures entertainment activities, including music, films, and video games have become an indispensable part of their daily lives. This justifies the addressing of sharing and recording software content as an

³⁹² See SHAHSHAHANI, *supra* note 353, at 282.

³⁹³ See *supra* note 316 and accompanied text.

industry that is connected to a public interest.³⁹⁴ Afterwards, and in determining the required remedies, the court could apply proportionality to see whether a property or liability rules that is applicable or whether it is a mixture between them.

a. Technological Neutrality

In the beginning of the final stage, the court addresses the technological neutrality of both the plaintiff and the defendant. In this step, the court examines whether the plaintiff has used technological measures which facilitate or impede consumers' usage of the content. In addition, the court also investigates the defendant's utilization of technology to determine if there have been attempts to avoid giving the copyright owners the fruits of their labor or to hinder the distribution of plaintiff's work.

b. Proportionality *Stricto Sensu*

In the second step of the third stage and the final factor in the three-phase approach, the court considers proportionality in its strict sense seeking to measure the effect of the copying act on the plaintiff's interests compared with achieving a public interest through the defendant's act. The outcome of this step is based on the overall findings of the previous factors. For instance, if the plaintiff's interest will be moderately affected if at all by the defendant's use that serves a public interest, then the defendant's use will not be considered as infringement.³⁹⁵

In this case, the use will continue to occur and without the paying of damages. On the other hand, if there is a considerable harm to the promotion and dissemination of the plaintiff's work, then the court should consider the significance of the defendant's act on the public interest. If there is a tie between the two sets of interests – the plaintiff's and the defendant's – then the court should allow the defendant's use while paying damages to the plaintiff. If, however, there is considerable harm to the plaintiff's work by the defendant's use in a way that results in damage to the public interest, such as not providing a safe environment for promoting and disseminating intellectual creations, then the court would order the defendant to refrain from such use along with paying damages to the plaintiff.

³⁹⁴ FISHER, *supra* note 33.

³⁹⁵ See also GUIDO CALABRESI, ET. AL., PROPERTY RULES, LIABILITY RULES, AND INALIENABILITY: ONE VIEW OF THE CATHEDRAL, 1115-1116 (1972). In this article, the authors demonstrate the possible legal remedies in the example of pollutant emission caused by one neighbor to another one, which are similar to the ones presented here.

D. Application of the Three-Phase Approach

In this section, the three-phase approach will be tested on *A&M Records, Inc. v. Napster*. The case is based on whether users' activity in downloading music files from Napster without paying is unlawful access to these works and if Napster is involved in a contributory infringement by facilitating the users' access to music files.³⁹⁶

In applying the first stage of the test, the copying acts made through Napster are not transformative, rather, they serve as sharing the content between users of Napster. Although Napster users relied on providing MP3 files, which are transformed from the original music files in order to provide smaller file sizes with lower qualities, the claim is based on the sharing of the files themselves, not the transformation to MP3 files. Thus, the transformativeness stage is not in favor of Napster.

Moving to the second stage, the plaintiffs provided in their defense that Napster allowed the sharing of "hit songs" that the plaintiffs relied on for their sales. In addition, there were many other songs that were expected to be major successes due to their popularity amongst consumers. Therefore, a contribution can be inferred in this respect. It is worth mentioning, however, that a plaintiff cannot raise, in general, a collective claim for all the available content provided on a platform. A contribution is not a random aspect of creation, which means that plaintiffs should be specific about the exact content the claim is being based on in order to determine the contributory aspect of their works. In the second step, the plaintiffs explained that they had contracted with many digital distribution services that would provide digital access to many songs. However, most of these distribution services were not yet active, and the planned release of most of these services was scheduled for mid-2000. On the other hand, Napster was released in mid-1999 as a form of digital distribution and, most importantly, was already well-accepted by many consumers. Moreover, the plaintiff did not provide any evidence that Napster had refused contracting with the plaintiffs to provide a mutual distribution system. Therefore, the plaintiffs ignored an obvious alternate mode of dissemination at a time when digital distribution of music files did not widely exist.

In applying the third and final stage, there were no extra measures taken on the plaintiffs' side that would have hindered or obstructed the function of the defendant's service. On the other

³⁹⁶ *Napster*, *supra* note 28.

hand, the defendant did not employ Napster to prevent users from paying the costs of the shared music files as the service was initially a tool to facilitate the sharing of these files. In addition, Napster is not a service that disrupts other digital distribution services, rather, it is a separate P2P service that operates in isolation from other publishing platforms. Therefore, both the plaintiffs and the defendant are equal in terms of technological neutrality as there are no irregularities found on either side of the case.

After considering all the findings of each factor, it is time to weigh the harm inflicted on the plaintiffs on the one side and the public interest in using the Napster service on the other. The plaintiff's main arguments against the defendant are that Napster's allowing the sharing of music files without payment or prior permission from the copyright holders would disrupt plans for dissemination conducted with several digital publishing services, and the decline of album sales due to the free sharing of music files, especially within the demographic of college students. On the other hand, Napster's main defense was its providing a more convenient means of sharing music files between individuals and giving users an opportunity to judge which music works might be later purchased. Although Napster did allow the sharing of music files without paying for them and without authorization, linking such usage with the decline of album sales is not definitive. The plaintiffs' claim that users would not buy the music albums if they had listened to them for free on Napster is not a decisive indicator to justify the sales decline, especially with the scarcity of digital distribution services.

Therefore, under this approach, Napster did allow its users to share music files for free and without permission from the copyright holders. However, given the scarcity of digital distribution services and the wide acceptance of users to Napster, the defendant can continue its services without paying damages.

E. Concerns Over the Three-Phase Approach

While a concern may arise that such an approach would increase judicial activism in determining the fairness of use in copyright, copyright involves many judge-made principles such as the fair use/fair dealing doctrine already. In addition, the development of this doctrine was made through the legal interpretations of courts. Therefore, courts, despite the inconsistencies, are the most capable of addressing the gaps in cases of software copyright. Another concern relates to whether such an approach fits in all cases of copyright or just intangible works. However, the three-phase approach does not include factors exclusively

related to software. Even the technological neutrality is not just related to software as there are many evolutions made to the accessing of non-software protected content. For all of these reasons the proposed approach is a way to present the possibility of applying an alternate mechanism in the current and future context of copyright cases.

VI. Conclusion

The current complexities of software copyright cases are only “snippets” of future ramifications. Many communities rely on advanced technology to access knowledge and information, and as time passes it will be very difficult, if not impossible, to abandon the advanced tools in accessing different content. It is unknown how technology will develop in the coming years and to what extent it will change how copyright works. However, Jacques Ellul gives us an idea of how to think about this aspect:

Knowledge will be accumulated in ‘electronic banks’ and transmitted directly to the human nervous system by means of coded electronic messages. There will no longer be any need of reading or learning mountains of useless information; everything will be received and registered according to the needs of the moment. There will be no need of attention or effort. What is needed will pass directly from the machine to the brain without going through consciousness.³⁹⁷

This statement was made several decades ago, and Ellul’s prediction of knowledge banks came to be true, and there is no telling whether the rest of his prediction will also happen. However, from the perspective of this paper, if copyright protections extend their reach to cover every aspect of access to knowledge and information, then acquiring any detail and the control of its dissemination will face many restrictions. It is for this reason that preserving the purpose of copyright through translating its provisions in the current context is an important task for courts in order to avoid the excessive restricting measures of copyright now and in the future.

³⁹⁷ RONALD TULLEY, IS THERE TECHNE IN MY LOGOS? ON THE ORIGINS AND EVOLUTION OF THE IDEOGRAPHIC TERM—TECHNOLOGY, *The International Journal Technology, Knowledge & Society*, 4, 1, 102 (2008).