COPYRIGHT LAW CHALLENGES IN TODAY'S TECHNOLOGICALLY ADVANCED CYBERSPACE

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DECLARATION

I, Eva Ndenzako declare that the information in this thesis is true to the best of my knowledge and has never been presented for any academic award in any institution or university. All sources used in this research study have been rightfully acknowledged.

Signature: Date

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ABSTRACT

Copyright law is a branch of intellectual property law that provides a legal foundation for the innumerable transactions by which authors, artists and composers of qualifying works and neighboring rights are aid for their intellectual creativity. This protection extends to a number of works but in Uganda the scope of copyright protection is enshrined in Section 5 of the Copyright and Neighboring Rights Act to include literary works, dramatic works, musical works, artistic works and derivative works.[1]

This research study focuses on the need for copyright laws to change in response to technological advancements because they are not sufficient and comprehensive enough to regulate the enforcement of copyright protection given the speed of technological developments in the cyber space today.

[1] CNRA Act No.19 of 2006.

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CHAPTER ONE

GENERAL BACKGROUND

1.0 Introduction

Copyright is a set of exclusive rights granted to the author or creator of an original work, including the right to copy, distribute and adopt the work. In other words, the law of copyright gives an author of an original work exclusive rights for an ascertainable period of time to exploit and benefit from the work including its publication. Copyright law deals with particular forms of creativity concerned primarily with mass communication. In Uganda, the copyright legal regime is governed by the Copyright and Neighboring Rights Act[2].

Copyright law therefore provides a legal foundation for the innumerable transactions by which authors, artists and composers of qualifying works and neighboring rights are aid for their intellectual creativity. This protection extends to a number of works but in Uganda the scope of copyright protection is enshrined in Section 5 of the Copyright and Neighboring Rights Act to include literary works, dramatic works, musical works, artistic works and derivative works.[3]

For a work to qualify for copyright protection, it must be authored by a physical person who created or creates the work protected under Section 5[4] and includes a person or authority commissioning work or employing a person making work in the course of employment. For a work to qualify for copyright protection, it must also be original, that is, it should be the product of the author's independent efforts hence it should not be merely copied or lifted from another source but the author must have put some efforts to come up with the work also known as the sweat of the brow. Lastly, the work must be reduced to material form because copyright protects the expression of the ideas in the tangible form and hence it is a reward for the hard work and energy spent on expressing the ideas and not the ideas themselves.

Cyber space refers to an interconnected digital environment characterized by a virtual world popularized with the rise of the internet. The term cyber space has become conventional to describe anything associated with general computing, internet and networking. Cyberspace has

[2] The Copyright and Neighbouring Rights Act, 2006.
[3] CNRA ,Act No.19 of 2006.
[4] *Ibid.*

become more prevalent in the digital era in which digital technologies such as the computers, mobile devices, artificial intelligence have become ubiquitous and have significantly transformed the way we communicate, work and live our lives. Technological developments in the cyber space have also affected the copyright law regime.

1.1 Background

The law of copyright and its developments can be traced from the United Kingdom "during the invention of the printing press which made it easier to copy a literary work and permitted an entrepreneur for the first time to make multiple identical copies"[5]

According to Professors L. Bentley and B. Sherman the law of copyright was not rationalized until the passage of the 1911 Copyright Act and it was then that it was codified into a modern statute which was later amended several times till the enactment of the copyright, designs and Patents Act 1988.[6] The numerous amendments made to the law of copyright was to protect works of literature and art more so in an era of rapid technological developments which allowed for easy copying, and high quality copies in particular which meant the explosion of the activities of copyright pirates and bootleggers.[7]

The primary function therefore of copyright is to protect authors of creative works from exploitation by other people of the fruits of their labor, judgement and skill and this protection is ensured by making it unlawful for other people to exploit or appropriate the work without consent or authorization. In Uganda, this is in line with the Constitutional right to property.[8]

Specifically in Uganda, copyright law is traced from the United Kingdom and was domesticated by the 1902 Orders-in-Council under which Uganda adopted the Copyright Act of 1956 of the United Kingdom which after independence was renamed as the Copyright Act of 1964. It remained in effect until the enactment of the 2006 Copyright and Neighboring Rights Act which repealed

[5] Torremans, P. *Intellectual Property Law* (London: Butterworths, 3rd. Edn, 2001) p.171.
[6] Bentley, L. &Sherman, B. *Intellectual Property Law* (New York: Oxford, 3rd Edn, 2009) pp.33-34
[7]Colston, C. *Principles of intellectual Property Law* (London: Cavendish, 1999) p.167
[8] Article 26 of the Constitution of the Republic of Uganda.

the Copyright Act of 1964 that had become substantially outdated and incapable of accommodating the technological advancements and recently enacted international instruments.

The international developments of copyright law have had an immense impact on the development of copyright law in Uganda. On top of the developments of copyright laws in the United Kingdom, the enactment of the 1971 Berne Convention which set out the standard principles for copyright protection also revolutionaries copyright law in Uganda. Additionally, the 1995 World Trade Organization's (WTO) and its 1994 Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement which sets the standards and harmonize the regulation, administration and enforcement of intellectual property law. Uganda's current 2006 Copyright and Neighboring Rights Act indeed clearly attempts to meet the country's obligations under the international law and harmonize the laws and policies on copyright and neighboring rights. Uganda is also an active member of the African Economic community (AEC), the African Regional Intellectual Property Organization (ARIPO) and the East African Community (EAC).[9]

Cyber space refers to an interconnected digital environment characterized by a virtual world popularized with the rise of the internet and artificial intelligence. A technologically advanced cyber space has significantly impacted copyright enforcement and as a result, issues of copyright enforcement in the cyberspace are increasing along with the technological advancements. There is need for copyright laws to change in response to technological advancements because they are not sufficient and comprehensive enough to regulate the enforcement of copyright protection given the speed of technological developments in the cyber space today.

1.2 Statement of the Problem

Copyright is one of the intellectual property rights that accrue to authors of creative works. The primary function of copyright is to protect authors of creative works from exploitation by other people of the fruits of their labor, judgement and skill and this protection is ensured by making it unlawful for other people to exploit or appropriate the work without consent or authorization. In Uganda, this is in line with the Constitutional right to property.[10] Similarly, in line with Article 189 of the Constitution, the Sixth Schedule lists the functions and services for which the

[9] Uganda Law Reform Commisssion. *A Report on the Background Study on the Legal Implementation of the World Trade Organizations Agreements* (Kampala: ULRC Publication No. 32, 2004) p.31
[10] Article 26 of the Constitution of the Republic of Uganda.

Government of Uganda is responsible for and it includes under clause 6, "copyrights, patents and trademarks and all forms of intellectual property…" Thus, it is clear that the regulation of copyrights and any other forms of intellectual property is a responsibility of the Government of Uganda.[11]

Uganda enacted the Copyright and Neighboring Rights Act in 2006 to also guarantee the protection of intellectual works and the rights of authors in the digital environment. Additionally, several legislations on the international scene have been enacted to guarantee and regulate copyright law and protection. These include the 1995 World Trade Organization's (WTO) and its 1994 Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement and the 1971 Berne Convention.

The world of cyber security is constantly evolving and there has been a lot of advancements in cyber technology such as social media, artificial intelligence and the rise of the internet. The developments in cyber technology have improved speed, quality and cost of goods and services. It is indeed true that we cannot undermine the benefits of the advancement in cyber technology. Unfortunately, it has become a major concern for copyright law.

Some of the advancements in cyber technologies include artificial intelligence. Artificial intelligence refers to machines that respond to stimulation consistent with traditional responses form humans, given human contemplation, judgement and intention. Although artificial intelligence is advantageous as it is capable of operating faster and making quick decisions, it introduces complexities in copyright law. For example, the current legal framework in Uganda confirms that only humans are capable of authorship of creative works.[12] This creates problems when artificial intelligence creates works. The Copyright and Neighboring Rights Act is silent on whether works produced by artificial intelligence are copyrightable, and if so, who owns the copyright in such works.

Additionally, the ability of artificial intelligence to generate copies and variations of existing work has also facilitated copyright infringement. The current legal framework does not address who will be liable in such cases where infringement is facilitated by artificial intelligence.

[11] Article 189(2). *Ibid*.
[12] S.2 ibid.

Another cyber technology is peer to peer file sharing. In general, file sharing refers to the electronic sharing of digital files including audio recording, movies and television shows. Peer to peer technology is a method of exchanging files without the use of a middle man server. Peer to peer technologies such as Napster and Gnutella which are well known allow users to share, transmit and download files over the internet within a short period of time. Although it wasn't designed to facilitate copyright infringement, peer to peer file sharing is increasingly being used to download illegally copyrighted materials.

Other forms of cyber space technological developments such as the internet, social media and mobile devices increase easy dissemination of information which has given rise to the quick and widespread reproduction, distribution and access to copyrighted materials in digital formats within the cyber space. However, it is hard to enforce copyright infringement liability where work is copied across the internet. There is no legal framework that clearly pronounces itself on who will be responsible. Will it be the party who dispatches the work, the party who received it or the internet service provider?

Therefore, **the current copyright legal regime in Uganda is not sufficient and comprehensive enough to address the challenges brought about by the technological development of the cyberspace.**

If the current Copyright and Neighboring Rights Act is not amended to critically address these challenges relating to copyright law that are brought about by the advancement in technology, cases of copyright infringement are going to rise, the enforcement of liability in cases of copyright infringement will be complex and issues of copyright authorship will also suffice.

1.3 General Objective

- To examine the copyright challenges in today's technologically advanced cyber space.

1.3.1 Specific Objectives

- To identify some of the current cyber technological advancements.
- To identify the gaps in the current copyright law regime.
- To recommend measures can be taken to address the copyright challenges today.

1.4 Research Questions

- What are the copyright challenges in today's technologically advanced cyber space?
- What are some of the current cyber technological advancements?
- What are the gaps in the current copyright regime?
- What measures can be taken to address the copyright challenges today?

1.5 Justification

The primary function therefore of copyright is to protect authors of creative works from exploitation by other people of the fruits of their labor, judgement and skill and this protection is ensured by making it unlawful for other people to exploit or appropriate the work without consent or authorization. In Uganda, this is in line with the Constitutional right to property.[13] In words, the protection of property including intellectual property like copyright is a Constitutional right.

But the world of cyber security is constantly evolving and there has been a lot of advancements in cyber technology such as artificial intelligence, peer to peer file sharing, social media, machine learning. The development of cyber technologies is just increasing every day and is not going to stop.

With this advancement in technology, new challenges rise relating to copyright law that the current legal regime doesn't address. For example, the ownership of copyrightable works has become complex today with the rise of artificial intelligence. The current legal framework in Uganda only confirms that human that are capable of authorship of creative works. However, today there are artificial generated works and this raises questions as to who owns copyright in such works or whether they lack authorship in the legal perspective.

Another issue that the law doesn't critically address is infringement of copyright liability across the internet. For example, artificial intelligence is capable of generating copies and variations of already existing work which has indeed facilitated copyright infringement. But the law doesn't address who is to be held liable for copyright infringement in such cases. Is it the owners of artificial intelligence or can the Artificial intelligence model itself be liable? Similarly, social media has also made it hard to enforce copyright infringement liability where work is copied across

[13] Article 26 of the Constitution of the Republic of Uganda.

the internet. There is no legal framework that clearly pronounces itself on who will be responsible. Will it be the party who dispatches the work, the party who received it or the internet service provider?

Advancements in cyber technology have also facilitated copyright infringement. For example, with the emergence of the digital era such as the internet, social media and mobile devices, there is easy dissemination which has given rise to the quick and widespread reproduction, distribution and access to copyrighted materials in digital formats within the cyber space. The current legal regime does not effectively address such issues and it is not comprehensive enough to regulate issues of copyright infringement across today's cyber space that is technologically advanced.

Therefore, since Article 26 guarantees the protection of property which includes intellectual property like copyright and the Copyright and Neighboring Rights Act provides for the protection of works created by an author or creator of an original work and guarantees that he/she enjoys exclusive rights for an ascertainable period of time to exploit and benefit from the work including its publication, I am justified to analyze whether the current legal regime addressees the copyright challenges caused by the advancement in cyber technology.

1.6 Significance

The study will also serve as an eye opener to Parliament that has the Constitutional mandate to make laws on any matter for the peace, order, development and good governance of Ug anda[14] that in light of the different technological developments, it is time that the Copyright and Neighboring Rights Act be amended to address the complexities in copyright law brought about by the advancement in cyber technology. Some of the complexities relate to whether works generated by copyright can be copyrightable and if so, who owns the copyright in such works. Another complexity the law is silent about is, who is to be held liable in circumstances where copyright infringement is facilitated by AI.

The study will also be of importance to researchers and academicians who delve into research as this is not a widely researched topic. It will encourage them to critically analyze the current legal

[14] Article 79 of the Constitution of the Republic of Uganda(as amended).

regime regulating copyright law and find that it isn't comprehensive enough to address the emerging problems of copyright law brought about by the advancement in technology.

The study is also meant to bring awareness to the general public but most importantly to creatives about the different challenges in enforcing copyright protection laws due to the advancement in cyberspace technology. This research study recommends to authors and creatives in Uganda that they should in addition to the local legal framework, adopt independent modern technological measures such as block chain and watermarking technology to protect their work and prevent undue exploitation.

This research study is important to creatives and innovators as it recommends that Parliament must also in exercise of its constitutional mandate to enact laws, provide laws that ***clearly define the attribution of liability for copyright infringement by AI-generated content.*** When there is clear criteria that attributes liability for copyright infringement, creatives and innovators of works are certain on who to bring claims against to recover compensation.

1.7 Scope of the Study

1.7.1 Geographical scope

The study was done in Uganda because of the ease and access to information.

1.7.2 Thematic scope

The study was confined to analyzing the copyright regime in Uganda, that is, the Copyright and Neighboring Rights Act of 2006 to find out whether it addresses the challenges in copyright law brought about by the developments in cyber technology. The study specifically focused on elements of cyber advancements and the challenges they pose to copyright law.

1.7.3 Time scope

The study is confined for a period of eighteen years, that is from 2006 when the Copyright and Neighboring Rights Act was enacted to date.

1.8 Literature Review

A number of scholars have presented various forms of literature concerning copyrights which include the following;

1. James Boyle – In his book The Public Domain: Enclosing the Commons of the Mind[15] wrote about the importance of copyright and said that the promise of copyright is for authors to actually make a living from one's expressive power for example a cartoonist with a uniquely twisted view of life, a musician who can make a slack key guitar do very strange things or a person who likes to take amazingly saccharine pictures of puppies and put them on generic cards because you risk your time and your effort and your passion and if the market likes it, you will be rewarded.

   He mainly discusses the idea of public domain and describes how it is being tragically eroded by our current copyright, patent and trademark laws. Boyle's argument is based on the presumption that all original ideas derive from an existing body of knowledge which is the commons or the public domain which is our common storehouse of knowledge. And he states that by ignoring we can only watch as the intellectual property owner withdraws what is already known into the field of its monopoly and dimmish the resources available to skillful men.

   Through a series of arguments, he discusses the founding fathers view of intellectual property rights and monopolies, to the challenges of digital technology, the peer-to-peer revolution and the legislative responses and technological counter responses. Although he doesn't apportion blame, he states that intellectual property regimes have become too overreaching and have reduced the scope of innovation and development. His style belies the depth of arguments as he effortlessly leads the reader to the solution. He suggests the solution is a creative common.
2. J. Axhamn and M.LL Barcellos and other contributors in their book Intellectual Property Perspectives on the Regulation of New Technologies[16] explore the challenges that emerging technologies pose for traditional notions of intellectual property law and policy. They ask whether the law is evolving in the right direction and if the regulation of emerging technology is supported by sound policy objectives. They discuss how intellectual property law has responded to challenges posed by innovation and new technologies and focus on the impact of digital technologies, specifically on copyright law and policy.

[15] Boyle, J. *The Public Domain: Enclosing the Commons of the Mind* (Yale University Press, 2008)

[16] Axhamn J.& Barcellos M. *Intellectual Property Perspectives on the Regulation of New Technologies* (

3. Dr. Aviv Gaon in his book The Future of Copyright in the Age of Artificial Intelligence[17] explores the concepts of authorship and artificial intelligence. He advocates for a more holistic approach to authorship and argues that there is no good reason to exclude computer-generated and Artificial intelligence creation from copyright. In his opinion, the law should evolve to recognize artificial intelligence as capable of copyright-protected authorship of creative works.
4. Matthew Rimmer in his book Digital Copyright and the Consumer Revolution: Hands Off My iPod[18] evaluates the growing consumer revolution against digital copyright law focusing on recent copyright law in the United States. The author argues that the paradigm of copyright law has changed and that there is a new war between copyright holders and consumers. He writes that the consumer has become an active user of copyright work because technology allows the consumer to become a user and to use as they fit. He talks about the rise of Napster and Grokster that encourage file sharing online and advises companies not to follow their knee-jerk reaction to quash new technologies since they always end up profiting from new opportunities that these technologies introduce. He states that copyright holders are foolish to reel against technological developments that they see are putting their intellectual property in jeopardy.
5. Andrew Gowers in his book Gowers Review of Intellectual Property[19] discusses the advantages of intellectual property law, that is, intellectual property rights provide incentives to create knowledge because ideas are expensive to produce and cheap to copy. Another advantage of intellectual property rights is to develop public knowledge especially patent rights. He also argues that there must be a balance between the protection of intellectual property rights and economic incentives to innovate.

   In his Review he also discusses the different subjects for copyright protection and states that copyright protects many different types of subject matter, from literary, dramatic, musical, artistic and cinematographic works to computer programmes, databases, sound recordings and broadcasts. Copyright protecting different classes of work is subject to different domestic and international treaties. Although this reduces the coherence in the

[17] Gaon A. *The future of Copyright in the Age of Artificial Intelligence,* (Elgar Law, Technology and Society Series, 2021)
[18] Rimmer M. *Digital Copyright and the Consumer Revolution: Hands Off My iPod* (Osgoode Hall Law Journal, 2008)
[19] Gowers A. *Review of Intellectual Property*, (2006)

copyright system, coherence across all types of copyright may restrict the balance in the system as not all copyright works are deemed eligible for the same style of protection. For example, the term of protection for typographical arrangement, that is, the arrangement of words on a page, is currently 25 years, compared with the life of creator plus 70 years for literary works. The term of protection is intended to reflect the creative effort required, which would not be reflected in a blanket harmonization of term.

He discusses the fact that globalization and technical changes have had significant impact on the intellectual property system. He states that it is vital that in both the rights and the exceptions to those rights, which limit the control of the rights owner, the IP system is robust and be able to cope with technological and environmental changes so it can continue to facilitate innovation and ensure public support.

Additionally, he discusses fair use as an exception to copyright infringement. He says that fair use can create economic value without damaging the interests of copyright owners. He advocates for a broader approach to the exception of fair use because it opens up commercial space for others to create value.

For example, he proposes that in order to ensure that educational establishments are able to take advantage of new technology to educate pupils regardless of their location, it is necessary to expand the existing copyright exceptions. He states that at present an educational establishment can copy a broadcast work (for example, a radio or television programme) and show it to its students without infringing copyright provided the activity is for a non-commercial educational purpose. In 2003 the exception was modified so that educational establishments could allow students on the premises to see the programme in their own time. However, the exception does not extend to situations where students are not on the premises of the educational establishment. This means that distance learners are at a disadvantage compared with those based on campus and thus these constraints disproportionately impact on students with disabilities who may work from remote locations.

The exception should therefore be expanded so that copyright is not infringed where a copy of a broadcast (for example, a television programme) is communicated to students who are not located within the educational establishment. It is the Review's view that such an exception is permitted provided that the education provided is not commercial and any

source is indicated. It will also be necessary to ensure that access to such material should not be generally available to the public: accordingly, distance learning students will need to access the material securely.

Gower also stated that the Review believes it is possible to create a very limited private copying exception without a copyright levy. If rightsholders know in advance of a sale of a particular work that limited copying of that work can take place, the economic cost of the right to copy can be included in the sale price. The "fair compensation" required by the Directive can be included in the normal sale price. This means, however, that any private right to copy cannot be extended retrospectively as copies of works already sold would not include this "fair compensation". Therefore, collecting societies may wish to consider making a single block license available to allow consumers to format shift their back catalogues legitimately. There should be some strict limits on the scope of any private copying exception. The Review recommended that the private copying should be limited to 'format shifting' (that is, transferring a work from CD to an MP3 player or from a video tape to DVD) rather than simply allowing any copies to be made for private purposes. The exception would only allow one copy per 'format', but it would also have to recognize that transfer between formats may require intermediate steps (or formats) to be taken.

6. William Patry in his book Moral Panics and the Copyright Wars[20] discusses the battle between copyright laws and new technology and consumers. He argues that copyright is a utilitarian government program and not a property or moral right. And hence as a government program, copyright must be regulated and held accountable to ensure that it is serving its purpose

   In his conclusion he argues that the call for strong copyright laws miss the point entirely. He says that the only copyright laws that we need are effective laws that further the purpose of encouraging the creation of new works and learning.

[20] Patry W. *Moral Panics and Copyright Wars* (1st Edn, Oxford University Press)

1.9 Methodology

The study will basically entail qualitative and quantitative research. Basically, use of library information and materials there in will be a useful source of my research. This will review the literature of various authors in the subject of copyright.

I will also conduct interviews with re-known copyright stakeholders to analyze the impact of the cyber revolution on the copyright system of Uganda.

CHAPTER TWO

LEGAL REGIME GOVERNING COPYRIGHT IN UGANDA

2.0 Introduction

The Copyright and Neighboring Rights Act, 2006 is the major copyright law in Uganda. This Act was the first step towards reforming the law relating to copyright and neighboring rights in Uganda. The Act was enacted to repeal and replace the Copyright Act Cap 215 which had not been enacted to cope up with the commercial and technological developments. It therefore became necessary that Uganda enacts an act that provided relevance to the present commercial advancements.

Uganda also enacted the Act so as to harmonize different international intellectual property laws. Uganda became a member of the World Trade Organization(WTO) and had a requirement under Article XVI.4 to ensure that its laws and regulations are compliant with the WTO Agreement.

It provides for the protection of literary, scientific and artistic intellectual works , musical works , derivative works, dramatic works and their neighboring rights under S.5.

Literary works

Literary works that are eligible for copyright protection include novels, stories, poetic works, plays, textbooks, dictionaries among others.

Dramatic works

Dramatic works that are eligible for copyright protection include dance, miming and karaoke.

Musical works

Musical works that are eligible for copyright protection include songs. It is important to note that mere noise is not the same as music. The sound of music is intended to produce effects of some kind on the listener's emotion and intellect unlike noise.

Artistic works

Artistic works that are eligible for copyright protection include works of drawing, painting, photography, typography, mosaic architecture, sculpture, engraving, lithography and tapestry.

Artistic works also include works of applied art, whether handicraft or produced on industrial scale and works on all types of designing as works of art and fit for copyright protection.

Derivative works

Derivative works are defined as means of work resulting from an adaptation, translation or other transformation or other transformation of an original work but which constitutes an independent creation of itself.

Derivative works also include collections of pre-existing works like encyclopedia and anthologies which by selection and arrangement of their contents constitute original works.

2.1 Rights comprised in the CNRA

The Act[21] provides for the rights comprised in copyright, that is, the economic rights and moral rights.[22]

The economic rights of the author envisage the right to perform, produce or reproduce a protected work, creation or derivative works and any other exploitation of the work. Therefore, any person or entity who wants to exercise any of the above rights must first seek the consent of the owner or be liable for copyright infringement. Economic rights can be assigned, licensed and transferred however this must be in writing and signed by the owner or his agent.[23]

Moral rights refer to the right to claim authorship or performance.[24] The moral rights include the right to make the work available to the public for the first time; the right to authorship, the right to object to any form of distortion or modification that may be prejudicial to the owner's reputation.

S.10 recognizes primarily two aspects of moral rights;

[21] Copyright and Neighboring Rights Act, 2006.
[22] S.9
[23] S.14(3)
[24] S.2

1. The right of attribution or paternity. This is the right of the author to be made known or identified to the public as the originator of the work[25]
2. The right to integrity. This is the right of the author to prevent any sort of distortion, mutation or even alteration of the work.[26]

An analysis of the moral and economic rights shows that whereas moral rights seek to protect the integrity of the author, economic rights seek to mainly protect the financial interests of the author. Another major distinction between moral and economic rights is the fact that the former is in perpetuity whereas the later are not. In other words, even after the death of the author, the successors in title of the deceased's estate can still moral rights even if the work has fallen in the public domain. On the other hand, economic rights in copyright cannot be protected once the work falls in the public domain or after the duration of copyright has elapsed.[27]

Another distinction that can be drawn between moral and economic rights is that moral rights are non-transferable, that is, inalienable since they belong to the author and authorship of a protected work is permanent in the work and cannot be altered. Conversely, economic rights belong to the owner of the work who has the liberty to assign, license, or transfer them.[28]

Neighboring Rights

The Copyright and Neighboring Rights Act also provides for neighboring rights. These are rights attached to the auxiliary role played by performers, producers of sound recordings, audio visual and broadcasting companies.[29] Auxiliary is the intermediary between the original authors of works and the consumers. For one to enjoy a neighboring right they must be a performer. According to S.2, a performer includes *an actor, actress, singer, musician, dancer or other persons who act, sing, deliver, declaim, play in , interpret, or otherwise perform, literary or artistic works or expressions of folklore.*

[25] S.10(1)(b)
[26] S.10(1)(c)
[27] S.13
[28] S.14.
[29] S.21.

In the case of Sikuku Agaitano v Uganda Baati[30] the plaintiff alleged that the defendant used his image in commercial advertisements which were run in several local television stations. He contended that the defendant used his image on the company's Contractors Year Planner calendar which they distributed to their customers without his consent. He contended hence that this amounted to infringement of constitutional and neighboring rights.

On the other hand, the defendant alleged that the plaintiff is an employee of the defendant company and was one of the employees who volunteered to have their images used for advertisements. One of the company managers had earlier called a meeting where all the employees were in attendance and explained to them that this was a voluntary exercise and those interested sign for a new uniform. The plaintiff bought the uniform and photos were taken of him as he carried on his usual work. The plaintiff alleged that he should enjoy some neighboring rights in the images because he was a performer.

One of the issues before court was whether the plaintiff enjoyed any neighboring rights.

The court held that the plaintiff did not enjoy any neighboring rights since he was not a performer as per S.2. Court held that the plaintiff was not a performer because he was going about his usual business when he was filmed. He was not required at all to pose for any photograph or the filming. It was merely in the ordinary course of his duty as a worker. However, the court stated that had the plaintiff been an actor then he would have qualified to be a performer under the Act.

2.2 Requirements for copyright protection

1. **Originality**

   According to S.4, for works under S.5 to qualify for copyright protection they must be ***original.*** A work is original if it "*is the product of the independent efforts of the author."*[31]
   Originality is a cornerstone of contemporary copyright law. In order to receive copyright protection, works must be "original"
   One of the persistent challenges for the courts has been identifying when particular works are original. Case law has gone ahead and expounded on this aspect or originality.

[30] Sikuku Agaitano v Uganda Baati [2014] UGCommC 135.
[31] S.4(3)

In the case of Walter v Lane[32] reporters from The Times newspaper wrote shorthand notes of a series of speeches given by the Earl of Rosebury and later edited them, adding punctuation, corrections and revisions to reproduce verbatim the speeches that were later published in The Times under the proprietorship of Arthur Walter.

John Lane published a book called *Appreciations and Addresses, Delivered by Lord Rosebery* including the speeches taken from The Times.

The issue before court was whether the reporters of the speech could be considered authors under the copyright law.

The House of Lords held that the reporters were authors under the Copyright law because of the effort ,skill and time that they had spent was sufficient to make them original. "*It was crucial that the preparation [of the reporters] involved considerable intellectual skill and brain labor beyond the mere mechanical operation of writing."*[33] Lord Davey stated that "*another person shall not just reap where they have not sowed."* In other words, another person shall not benefit from a work where one has not invested sufficient skill and judgement. A work is only "original" if it is *"the product of the independent efforts of the author."*

It was an early example of the **sweat of the brow doctrine**[34] which entirely relies on the skill and labor of the author for a work to be considered original.

The decision on Walter v Lane was thereafter understood as setting the "originality" threshold and was reaffirmed in cases such as Express Newspapers v News (UK)[35] and Sawkins v Hyperion[36]

In University of London Press v University Tutorial Press[37] the test of originality was explained by the Chancery Division also as the sweat of the brow. The University of Tutorial Press appointed two examiners for the matriculation of exams to be held at the University of London. One of the conditions for their appointment was that the copyright

[32] Walter v Lane[1900] AC 539

[3333] Aplin, Tanya; Davis, Jennifer. *Intellectual Property Law: Text and Materials.* Oxford University Press. P.73.

[34] Gendreau,Ysolde. *An emerging Intellectual Property Paradigm: Perspectives from Canada*. Edward Edgar Publishing, 2009. P151-152.

[35] Express Newspapers v News (UK) [1990] FSR 359.

[36] Sawkins v Hyperion [2005] EWCA Civ 565.

[37] University of London Press v University Tutorial Press [1916] 2 Ch 601.

subsisting in the examination papers would belong to the University of Tutorial Press. After the examinations, the defendant issued a publication that contained numerous papers including the ones set by the two examiners, with an answer and criticism manner in which the question paper was set. The plaintiff brought an action for copyright infringement.

The issue before court was whether the examination papers were original.

The Court held that the work must not necessarily originate from the author or be new or original but the person must have put independent effort and skill to create it. The copyright Act also does not require that the expression be in an original form. It does however require that the work must not be merely copied from another work or source.

The two examiners had used selection, judgement and experience in order to prepare questions to test whether the students had read an understood the syllabus. Although the questions were prepared by relying on pre-existing knowledge common to all, they were not in themselves copied from anywhere. They originated from the two examiners and hence were copyrightable. In other words, following the sweat of the brow doctrine, substantial creativity is not required for a work to be original.

In the U.S jurisdiction, the courts have however given importance to both the creative and subjective contribution of the authors. In the case of Feist Publications, Incorporated v Rural Telephone Service Company[38] , the Supreme court held that for a work to be original, it must not only have been the product of independent creation, but it must also exhibit a "**modicum of creativity**" This doctrine stipulates that originality subsists in a work where a sufficient amount of intellectual property and judgement has gone onto the creation of the work. The standard of creativity should not ne high but a minimum level of creativity should be there for copyright protection.

The facts of the case are that the appellant had copied information form the respondent's telephone listings to include in its own after Rural Telephone Service Company had refused to license the information. Rural Telephone Service Company sued for copyright infringement.

The issue before court was whether a compilation like that of a telephone directory is copyrightable.

[38]Feist Publications, Incorporated v Rural Telephone Service Company 499 U.S.340.

The court held that compilations of facts are copyrightable but names and addresses are not copyrightable. The court held that Rural's Directory displayed a lack of requisite standard of copyright protection because it a mere compilation of date without any minimum creativity, which is a requirement of copyright protection.

The Court clarified that the intention of copyright law was not to reward the efforts of persons collecting the information-the so -called sweat of the brow but rather to promote and encourage the creative expression. The standard or creativity is extremely low. It need not be novel; it need only possess a "spark" or "minimal degree" of creativity to be protected by copyright.

The sweat of the brow doctrine is applied in jurisdictions like the UK, Uganda and Australia and it requires that for a work to be original, there must be labor, skill and judgment and it is limited to the extent that the work originated from the author.

On the other hand, the criteria for originality in the U.S is slightly higher that than required in the UK and Uganda. The criteria followed in the U.S is that to ascertain the originality of a work is the modicum of creativity doctrine. It requires that for a work to be original it must have an aspect of creativity. The standard or creativity is extremely low. It need not be novel; it need only possess a "spark" or "minimal degree" of creativity to be protected by copyright.

2. <u>Material form</u>

S.4(3) requires that a work shall be protected by copyright where it is reduced in material form in whatever method irrespective of quality of the work or the purpose for which it is created. This principle is also enshrined in Article 2 of the WIPO Copyright Treaty[39] which provides that copyright protection extends to expressions and to ideas, procedures, methods of operation or mathematical concepts as such.

The requirement that a work first be reduced into material form is enshrined in the legal principle that copyright does not protect ideas, concepts, procedures, methods or other

[39] WIPO Copyright Treaty 1996.

things of a similar nature.[40] Copyright is therefore a reward for the hard work and energy spent on expressing the idea and not the idea itself.

The material form requirement is an aspect of the **idea-expression dichotomy** which recognizes that while several people might have the same idea, there may be various unique ways of expression. Thus, *the granting of protection over an idea, which is essentially a thought, may cause severe hindrance to creativity.*[41] Generally, the principles of idea/expression dichotomy in the UK and USA are similar.
This principle therefore recognizes that ideas are abstract and can be common to everyone. As a result, what deserves copyright protection therefore should not be the idea but rather, the creative way an author expresses the idea.

In the UK , the courts have followed the position that thoughts and plans existing in a man's brain are not "works"; but once reduced into writing or other material, such ideas through their material form, may be susceptible to copyright protection. In other words, the use of an idea does not constitute copyright infringement. However, the use of an idea constitutes copyright infringement if that idea has been used in a more detailed proposition or collection of ideas, patterns of incidents, or a compilation of information from the original document or material.
In the case of Tate v Fullbrook[42] the court held that a visual skit for a musical hall sketch involving the use of fireworks was not the subject matter for copyright protection because it had not been reduced into writing.

In the United States, the idea/ expression dichotomy was first applied in the Supreme Court case of Baker v Selden[43] In this case, the plaintiff had authored a book in which he explained a better system of book-keeping through the use of a certain arrangement of columns and headers that made the ledger simpler to read. Baker achieved a similar outcome although by arranging the titles differently.

[40] S.6.
[41] Baker v Selden 101 U.S. 99 (1879)
[42] Tate v Fullbrook [1908] 1 KB 821
[43] Baker v Seden 101 U.S. 99 (1879)

The Supreme Court stated "*copyright law does not protect ideas, facts, news or information but rather the expression of such ideas such as a particular book or a painting."* The court further explained that there was a clear distinction between the book as such and the art which the book aimed to illustrate. Hence although, there is copyright protection over the publication and sale of the book, the same could not extend to the concepts and the art depicted in the book because it is equivalent to the notion of an idea which is different from its expression.

3. Authorship and ownership of copyright work

An author of a copyrightable work means "*the physical person who created or creates work protected under S.5 and includes a person or authority commissioning the work or employing a person making the work in the course of employment."*[44]

According to the Act, for one to qualify to be an author of a copyrightable work they *must be a physical person.* In Uganda, there has not been much case law regarding the requirement that an author must be a physical person. However, in jurisdictions like in the U.S where there is technological advancement in the form of artificial intelligence that is also capable of producing works, there has been much debate.

For example, in the case of Stephen Thaler v Shira Perlmutter[45], Dr. Stephen Thaler applied for copyright registration in a work of visual art produced by a generative AI system he created called the Creativity Machine. He sought to register his work as a computer-generated work made for hire since he created the machine which autonomously created the work. The Copyright Office denied his application explaining that the human authorship requirement in copyright law foreclosed protection for the AI generated work, since it is not the product of human creativity.

The issue before court was whether a work autonomously generated by an AI system is copyrightable.

The court upheld the Copyright Office's decision, explaining that under the plain language of the Copyright Act, an "original work of authorship" required that the author be a human

[44] S.2

[45] Thaler v Perlmutter D.D.C., Aug.18,2023.

based on the dictionary definition of "author" and historical recognition. It invoked the historical recognition in Burrow-Giles Lithographic v Sarony[46] to underscore the historical recognition of human creativity as fundamental to copyrightability.

However, the court also recognized the fact the "*we are approaching new frontiers in copyright as artists put AI in their toolbox to be used in the generation of new visual and other artistic work. The increased attenuation of human creativity from the actual generation of the final work will prompt challenging questions regarding how much human input is necessary to qualify the user of an AI system as an "author" of a generated work, the scope of the protection obtained over the resultant image, how to assess the originality of AI-generated works and where the systems may have been trained on unknown pre-existing works, how copyright might be used to incentivize creative works involving AI and more."*

This case highlights the intersection of copyright law, technology and creativity. The court in this case seems rigid in the legal tradition that views human authorship as a requirement for copyright protection. However, the increasing prevalence of AI generated works poses unique challenges that the court acknowledged but did not explore and neither does the Copyright and Neighboring Rights Act.

Another case in which the requirement that an author be a physical person was construed is Naturo v Slater[47]. In this case Naturo, a monkey took a series of selfies using photographer David Slater's camera. Slater published a book with some of these photos and one of the photos was circulated on the internet. Consequently, People for the Ethical Treatment of Animals (PETA) filed a suit on behalf of Naruto asserting next friend status and alleged that Slater committed copyright infringement by publishing the selfies.

PETA argued that Naruto was the author of the selfies and acknowledged that a claim of authorship by species other than homo sapiens might be novel but that "*the term authorship under the Copyright Act was sufficiently broad so as to permit the protections of the law to extend to any original work, including those created by Naruto."* On the other hand,

[46] Burrow-Gilees Lithographic v Sarony 111 U.S 53(1884).

[47] Naturo v Slater 888 F.3d 418 (9th Cir.2018).

Slater argued that the Copyright Act did not explicitly give nonhumans standing to sue for copyright infringement, Naruto did not have legal standing.

The court ruled that the Copyright Act does not plainly extend the concept of authorship or statutory standing to animals and that only works created by humans were copyrightable. Although the court ruled that animals di not have standing under the Copyright act, the question of whether Slater was never reached. Regardless pf whether the issue is animal authorship or authorship by artificial intelligence, this case also fails to provide any clarity as to who, if anyone, owns the copyright to a work created by a nonhuman entity.

Therefore, an author uses independent skill and effort to create a work and reduces the work into material form.

It is important to note that one may be an author of a work but not necessarily the owner of the work where that person assigns, licenses or transfers their rights in the work. [48]

Another scenario where one may be the owner of a work when they are not necessarily the author is under contracts of employment.[49] Where a person creates a work in the course of employment by another person and there is no contract to the contrary, then the ownership of that work shall vest in the employer. One important thing to note here is that there must be a formal *contract of employment* and the work must me created *during the course of employment.*

Another circumstance where one may be an owner of a work they did not necessarily create is under a contract of commission.[50] In the case of Angella Katatumba v Anti-Corruption Coalition[51] the court made reference to the Cambridge International Dictionary of English and defined "commission" as to "*formally choose someone to do a special piece of work*."

[48] S.14

[49] S.8(1)(a).

[50] S.8(1)(b

[51] Angella Katatumba v Anti-corruption Coalition Civil Suit No. 307

From S.8, copyright ownership acquired by virtue of commissioned works is where someone specifically commissions another person to create the works where there is no employer-employee relationship or where there is one, the employee is specifically commissioned to create the works outside his contract of employment.

Therefore, court was of the view that commissioning cannot be assumed because it is a formal process of instructing a person to undertake a given task. The court also noted for one to claim a commissioned work, the commission precedes the creation of the work. Mere payment of a token of association does not amount to commissioning.

Lastly, where a person creates work under the direction or control of the Government or prescribed international body with no contract to the contrary then the ownership of that work vests in the Government or that prescribed international body.[52]

2.3 Copyright Infringement

2.3.1 Introduction

Copyright infringement is where without a valid transfer, license, assignment or other authorization under the Act, a person deals with any work or performance contrary to the permitted free use.[53] Where one exploits any moral or economic right in a work without valid authorization or consent commits an act of copyright infringement.

For one to bring a claim of copyright infringement they must therefore prove that the work is eligible for copyright protection within the meaning of s.5, and that the person who dealt with the work is not the author within the meaning of S.2 and S.4 or the owner and lastly that the use of the work is contrary to permitted free use under S.15.

2.3.2 Defenses to copyright infringement

Fair use or free use is provided for in the **three -step test** enshrined in the article 9 of the Berne Convention for the Protection of Literary and Artistic Works and article 13 of the Trips Agreement as an exception to the exclusive rights of authors guaranteed under

[52] S.8(2)
[53] Angella Katatumba v Anti-Corruption Coalition of Uganda [2014] UGCommC 107

copyright law. The three-step test is therefore a clause that is included in several international treaties on intellectual property *where signatories of these treaties agree to standardize possible limitations and exceptions to the exclusive right under their respective national copyright laws.*

The three-step test therefore mandates signatory countries of the Berne Convention and Trips Agreement to provide for laws that allow the reproduction of works in certain special cases, provided that such reproduction does not conflict with the normal exploitation of the work and does not unreasonably prejudice the legitimate interest of the author. In Uganda this is enshrined in s.15 of the CNRA.

Fair or free use is where the production, translation, adaption, arrangement or other transformation is for private personal use only.[54] It is also fair use where the extent of the quotation does not exceed what is justified for the purpose of the work in which the quotation is used[55], where the work is published or communicated to the public for educational and teaching purposes, it does not conflict the normal exploitation of the work by the author or owner and most importantly that acknowledgement is given to the work form which the quotation is made.[56]

In the case of Angella Katatumba v Anti-Corruption Coalition of Uganda[57], the plaintiff alleged that the defendant used a substantial portion of the lyrics and content in her production "Let's Go Green". The defendants incorporated them into an advertisement that was aired on several stations and worldwide. The plaintiff contended that the incorporation of the lyrics and her content into the advertisement was knowingly made by the defendant and for the benefit of the defendant without her knowledge or consent.

The issue before court was whether the defendant infringed on the plaintiff's copyright. One of the defenses raised by the defendants was the use fell within fair use which was an exception to copyright infringement. However, the court held that there are three key tests for the success of the fair use defense;

[54] Ibid.
[55] S.15(1)(b)(11)
[56] S.15(1)(b)(111)
[57] Ibid.

1. Whether he alleged fair dealing is in fact commercially competing with the author's exploitation of the copyright work, if it is not then the defense of fair use is likely to succeed.
2. Whether the work has already been published or exposed to the public. If it has, then court will be reluctant to say it was fair use.
3. The amount and the importance of the work that has been taken. Although it is permissible to take a substantial part of the work, in some circumstances the taking of an excess amount would not be fair use. The court also stated that substantial use is inconsistent with fair use where there is no acknowledgment of the author. As to what amounts to substantial, the court in the case of Ravenscroft v Herbert and New English Library Ltd[58] the court stated "*to ascertain what amounts to substantial, the plaintiff must prove a causal connection between his work and that of the defendant. If the two works are sufficiently similar, it raises a presumption that there was copying and the burden now shifts to the defendant to prove that his work is a creature of his/her own efforts."*

The court held that that the defendant has committed an act of copyright infringement because the adaptation of the song into an advertisement was not for private use only as it was released to the public. Secondly, the use of the song was not for educational purposes and even if it was it also requires the acknowledgement of the author.

It is also important to note that the defense of fair hearing is also available in reporting current events as per the case of British Broadcasting Corporation v British Satellite Broadcasting Ltd[59] In this case the court held that the defendant's use of short excerpts taken from the BBC's live broadcasts of World Cup matches to show highlights of the matched in its sports news programmes amounted to fair dealing for the purposes of reporting current events because the World Cup matches were current events and regard to the quantity and quality of the material use and its pertinence to the news reporting character of the programme in which it was used, the material was used in genuine news reports.

[58] Ravenscroft v Herbert and New English Library Limited [1980] RPC 193.
[59] British Broadcasting Corporation v British Satellite Broadcasting Ltd 99 F.3d 1381 (6th Cir. 1996)

Another defense to copyright infringement is consent. In the case of Sikuku Agaitano v Uganda Baati[60] The plaintiff alleged that the defendant used his image in commercial advertisements which were run in several local television stations. He contended that the defendant used his image on the company's Contractors Year Planner calendar which they distributed to their customers without his consent. He contended hence that this amounted to infringement of constitutional and neighboring rights.

On the other hand, the defendant alleged that the plaintiff is an employee of the defendant company and was one of the employees who volunteered to have their images used for advertisements. One of the company managers had earlier called a meeting where all the employees were in attendance and explained to them that this was a voluntary exercise and those interested sign for a new uniform. The plaintiff bought the uniform and photos were taken of him as he carried on his usual work. The plaintiff alleged that he should enjoy some neighboring rights in the images because he was a performer.

One of the issues before court was whether the plaintiff's enjoyed any neighboring rights and if so whether they were infringed/ whether the plaintiff gave consent.

Unfortunately, the court held that the plaintiff did not enjoy any neighboring rights since he was not a performer as per S.2. Court held that the plaintiff was not a performer because he was going about his usual business when he was filmed. He was not required at all to pose for any photograph or the filming. It was merely in the ordinary course of his duty as a worker.

The court further went on stated that even though the plaintiff had actually enjoyed neighboring rights there would not have been any copyright infringement because the plaintiff consented to the use of his image by participating in the event. He was aware that the photos would appear in various media as had been told to all the employees during the staff meeting and he was aware that it was a voluntary exercise which required obtaining a new uniform which he obtained with no coercion.

Another defense to copyright infringement is that the work is contrary to morality or public interest. Works that are against morality or public interest are not eligible for copyright protection. This is because it is against public interest to protect a work that is considered immoral by the

[60] Sikuku Agaitano v Uganda Baati [2014] UGCommC 135.

public. In the case of Glyn v Western Feature Film Company[61] the court rejected a claim for an injunction, damages and delivery up of al infringing films that did not constitute any infringement because the plaintiff's novel was highly immoral and it was on this ground that the action failed.

One can also raise the defense of expiry of copyright or neighboring right. S.13 deals with the duration of the author's copyright and S.26 deals with the duration of the performer's rights. When copyright or neighboring rights expire they fall within the public domain and hence anyone can be allowed to exploit them. It is important to note that the duration of copyright is not renewable and therefore, once it has expired, the work automatically falls within the public domain.

Once can also claim the defense of license, assignment , transfer or authorization to use the copyright work. It is important to note that a valid license must be in writing and signed by the owner of the right or his/her agent.[62] For example, in the case of Uganda Performing Rights Society v MTN (U) Ltd[63], UB40, a UK band performed a concert at Lugogo. However, before this concert, individual members of UB0 executed deeds of assignment wherein they assigned all their copyright to the plaintiff for the purpose of effective management. Therefore, on knowing that UB40 was going to be sponsored by the defendant, the plaintiff informed the defendant of their obligation to pay performance royalties but the defendant did not adhere. The plaintiff brought a claim for copyright infringement.

The court stated that by virtue of the deeds of assignment signed by individual members of UB40, all their economic and performing rights were now vested in the plaintiff as the legal owner. Court further stated that after assigning their rights, the members of UB40 no longer had any rights to transfer them and to that extent could not exercise any ownership rights in the works relating to public performance. Therefore, where the original owner of the copyright assigns his rights, he/she no longer owns the performing rights. The defendant therefore, had to first seek consent either by way of license form the plaintiff before causing the works to be performed in public.

[61] Glyn v Western Feature Film Company [1916] 1 Ch 261.
[62] S.14.
[63] Uganda Performing Rights Society v MTN (U) Ltd [2012] UGCommC 169.

2.4 Remedies for copyright infringement

1. One of the remedies available are damages.[64] This is in line with Article 45 if the TRIPS Agreement which obliges an infringer of intellectual property rights to give adequate compensation for the injury the author has suffered.
2. An injunction[65] is another remedy to majorly restrain the defendant from continuing with the infringement of copyright. It may be interim, that is, issued temporarily pending the determination of the main suit. It may also be temporary after the determination of the main suit and it to permanently restrain the defendant or his agents form reproducing, assembling and distributing copies of the plaintiff's works.
3. An order for account is another remedy granted for copyright infringement. A plaintiff may pray for an order of account of the profits made by the defendant . it is useful in compensating the plaintiff who has lost earnings from his intellectual property due to infringement f his copyright and neighboring right.
4. A copyrights holder may also make an ex-parte application for the inspection of or removal from the infringing person's premises of the copyright infringing materials which constitute evidence of infringement by the at person.[66] In the case of Uganda Performing Rights Society v Fred Mukubira[67], the High Court ordered for the delivery up and destruction of infringing copies which had not yet been sold. In the event that the defendant has sold copies of the infringing materials, he will then be required to account for the profit made of such a transaction or sale.
5. The plaintiff may also apply for an order of inspection by way of an Anton Piller order.[68] The Anton pillar order allows the plaintiff's attorney or his/her agents to search the defendant's premises for the purpose of inspection and removal of infringing materials from the person's premises which material constitutes evidence of the infringement.

[64] S.45(3)(4).
[65] S.45(1).
[66] S.45(2).
[67] Uganda Performing Rights Society v Fred Mukubira[2004] UGCommC 2.
[68] S.45(2).

6. Criminal sanctions may also be instated against the defendant for copyright infringement. This is in line with Article 61 of the TRIPS Agreement which obliges all member states to provide for criminal procedures and penalties to be applied at least in cases of willful trademark counterfeiting or copyright piracy on a commercial scale.[69]

[69] S.47.

CHAPTER 3

TECHNOLOGICAL DEVELOPMENTS AFFECTING COPYRIGHT LAW

3.0 Introduction

Technological developments refer to the systematic process of advancing and improving existing technologies or creating entirely new ones through research, experimentation and innovation. The word technology comes from two Greek words, "techne" meaning art, skills or craft and "lagos" meaning a word, saying or expression that expresses inward thought. Thus, technology means the skill to convey an idea to reach a goal.

Technological developments today provide innovative ways of doing work through various smart and innovative means. For example, communication has been made easier and faster even across the globe. During the Covid-19 breakdown period, technology enhanced education and brought virtual and online classes for students and teachers across the globe to share knowledge, ideas and resources from across the globe in the comfort of their homes. Technology is also considered to be the driving force behind improvements in the medical and healthcare field. Modern machines have helped doctors perform operations successfully, detect diseases such as cancer as early as possible.

3.1 Artificial Intelligence

Some of the technological developments in the cyber sector include **artificial intelligence(AI).** In the case of Wisconsin Alumni Researcher Foundation v Apple Inc[70], the Supreme Court of the US defined artificial intelligence as "*the capability of a machine to imitate intelligent human behavior*." The term artificial intelligence is applied to the project of developing systems endowed with the intellectual processes which are characteristic or unique to human beings such as the ability to reason, discover meaning, generalize or learn from experience. In other words, *artificial*

[70] Wisconsin Alumni Research Foundation v Apple Inc., (W.D. Wis. 2015)

intelligence refers to machines that respond to stimulation consistent with traditional responses form humans, given human contemplation, judgement and intention.

Artificial intelligence is increasingly being utilized in various aspects of the music industry for example applications such as music composition and production, personalized music and recommendations, music analysis and classification, virtual artists and performances.

Artificial intelligence is also being used in academic libraries to enhance services such as information retrieval, data analysis and user experience. This integration aims to improve efficiency and provide better support to library use.

However, one of the aspects of copyright law that artificial intelligence challenges is its ability to create works without direct human intervention and whether such work is copyrightable. Another problem brought about by artificial intelligence is its ability to generate copies and variations of existing work which has also facilitated copyright infringement and yet the current legal framework in Uganda governing copyright does not provide for who will be held liable for such infringement.

3.2 Peer to peer file sharing

Another cyber technology is peer to peer file sharing. In general, file sharing refers to the electronic sharing of digital files including audio recording, movies and television shows. Peer to peer technology is a method of exchanging files without the use of a middle man server. Although it wasn't designed to facilitate copyright infringement, it is increasingly being used to download illegally copyrighted materials. Peer to peer technologies such as Napster, Gnutella which are well known allow users to share, transmit and download files over the internet within a short period of time.

Another cyber advancement is social media platforms such as X(formerly known as Twitter), Tik Tok, Instagram and Facebook where one can easily make posts and they are easily copied and used by other people. Social media in particular facilitates infringement of image rights where one's image or likeness or identity are connected with a product or service without their permission in such a way that consumers are likely to be misled about the person's sponsorship or approval of the product or service in question.

CHAPTER FOUR

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

4.0 Introduction

Although artificial intelligence is advantageous as it is capable of operating faster and making quick decisions, revolutionize processes and services through advanced data analysis and automation, there is still need to investigate its impact on copyright law.

The fact that artificial intelligence has become a major concern for copyright law has been confirmed by the court in Stephen Thaler v Shira Perlmutter[71] where the court also recognized the fact the "*we are approaching new frontiers in copyright as artists put AI in their toolbox to be used in the generation of new visual and other artistic work.* ***The increased attenuation of human creativity from the actual generation of the final work will prompt challenging questions regarding how much human input is necessary to qualify the user of an AI system as an "author" of a generated work, the scope of the protection obtained over the resultant image, how to assess the originality of AI-generated works*** *and where the systems may have been trained on unknown pre-existing works, how copyright might be used to incentivize creative works involving AI and more."*

Copyright law in Uganda has not evolved to explicitly address and regulate the copyright-related issues emerging from the use of artificial intelligence technologies.

4.1 Summary of Findings

4.1.1 Authorship of AI generated works

One of the aspects of copyright law that artificial intelligence challenges is ***its ability to create works without direct human intervention and whether such work is copyrightable.*** The current

[71] Thaler v Perlmutter D.D.C., Aug.18,2023.

legal framework in Uganda confirms that only physical persons are capable of authorship of copyrightable creative works.[72] In other words, copyright law in Uganda has never stretched so far as to protect works generated by new forms of technology operating absent any guiding human hand. Thus, this creates problems when artificial intelligence creates works.

Although other jurisdictions like the USA and UK also are also rigid with the principle that copyright protection is not possible where there is no human intervention and that "*human authorship is a bedrock requirement of copyright,"*[73] they are not totally disregarding AI - generated works as subjects of copyright protection. Rather, in the USA, the courts have stated that it is possible for AI generated work to be copyrightable "**if there is sufficient human involvement and creativity in the AI generated work." In other words, "copyright protection will only accrue only to the human author and only for those portions of a work which have attributable human input arising to the level of originality."**[74]

This two-tier legal mechanism where AI works generated with human contribution receive sui generis rights, while those created autonomously by AI systems without human input are placed in the public domain, was discussed by Danie Gervais, a professor at Vanderbilt Law School. He stated that "***If a machine and a human work together, but you can separate what each of them has done, then copyright will only focus on the human part."*** This approach aims to balance innovation and creativity while ensuring fair protection for both human creators and AI systems.

However, the test for "s*ubstantial human intervention"* in AI generated works is higher in US jurisdictions. In other words, in the US, the human involvement in AI generated work must be so high for the work to copyrightable and owned by the person. For example, in "**Zarya of the Dawn**"[75] an artist Kristina Kashtanova used the AI Midjourney platform to create a graphic novel the Zarya of the Dawn. Kashtanova claimed that they used hundreds of text prompts and hundreds if iterations to create their artistic vison. She also claimed that in some instances they edited the images that Midjourney produced and altogether put hours of time and care into what became the Zarya of the Dawn. However, in considering the work that Kashtanova put into producing the graphic novel, the Copyright Office ultimately held that the images produced by Midjourney

[72] S.2.
[73] Ibid.
[74] Ibid.
[75] https://www.copyright.gov/docs/zarya-of-the-dawn.pdf.Last visited on May 6, 2024.

lacked sufficient human involvement in the creation process to qualify for copyright protection. The Copyright office further stated that "***even if a human enters text prompts into Midjourney and iterated an image until it becomes what they want, they are still at some level out of control over what the generative AI produces. And that for this reason, it is not truly the work of a human author."***[76]

However, in China, the human involvement in AI generated work must not be so high for the work to copyrightable and owned by the person. For example, in the case of **Li Yunkai v Liu Yuanchun**[77] represents a ground breaking moment in copyright law in China. The plaintiff Mr. Li, utilized a US based AI service to create a picture labeled "Spring Breeze Brings Tenderness", subsequently posting it on a popular Chinese social media platform. The defendant Ms. Liu incorporated the AI generated picture into her article without proper attribution, leading to a copyright infringement suit.

The major issues before the court were whether the subject AI generated picture constitutes a copyrightable work and therefore subject to Chinese copyright protection and whether the plaintiff is the copyright owner of the subject AI generated picture. On the first issue, the court stated that ***"as to whether the use of AI generated pictures could reflect the authors personalized expressions, it needs to be decided on case-by-case basis."***[78]

The court ruled that the subject AI generated picture "Spring Breeze Brings Tenderness" constitutes a copyrightable work since it falls within a work of fine art which is subject to copyright protection under Chinese law. The court also found that the work possessed originality, has a specific form of expression and that it was a creation of a human. On the criteria that the copyrightable work should reflect the contributions of human beings the court found that the plaintiff provided intellectual inputs throughout the picture generation process, including, choosing the preferred AI service provider, that is, the Stable Diffusion to render the picture style that the plaintiff prefers. Secondly, the plaintiff put around 30 "Prompts" and over 120 "negative Prompts" to determine the output of the Ai generated picture and thirdly, the plaintiff had set and

[76] Ibid.
[77] Li Yunkai v Liu Yuanchun Beijing Internet Court Civil Judgement (2023) Jing o491 Min Chu 11279.
[78] Beijing Internet Court Civil Judgement (2023) Jing o491 Min Chu 11279, p.18.

re-set various technical parameters to produce, choose and re-arrange the pictures that he factors. As such, the court determined that the picture reflected the plaintiff's intellectual input.

The court held in this case therefore, that although the plaintiff did not physically draw the specific lines using his own hands, the plaintiff is the one who designed the character styles and arranged the final layout and composition of the picture by trying different prompts words and various tech parameters. The court thus concluded that "***the entire process of adjustment and rearrangement reflected the plaintiff's aesthetic choices and personal judgment and therefore the picture constituted originality of the plaintiff."*** The plaintiff was therefore the author of the picture and the picture was therefore copyrightable.[79]

On the issue of whether the plaintiff is the copyright owner of the subject picture, the court ruled out the possibility that an AI service could itself be considered an author of a copyrightable work because an AI is not a human being. The court ruled that **"*because the subject matter picture was generated as a result of the plaintiff's intellectual input and reflected the plaintiff's personalized expressions, the plaintiff was the author of the subject picture."*** As a result, the court therefore found the defendant liable for copyright infringement.

In **Li Yunkai v Liu Yuanchun** and **Zarya of the Dawn** both the courts in China and the USA believe that only humans could be authors of copyrightable works. However, the difference between the court in China and the court in the US is that the former seems to draw a distinction between a straightforward artificial intelligence output where the human author simply takes and uses the output "as is" without any creative involvement and an artificial intelligence output where the human author keeps experimenting and adding various prompts and tech parameters until he receives the final satisfactory piece. The court in China deemed such work as "AI-assisted-work" where the plaintiff exercises aesthetic choices and personal judgement in the final representation of the work. In short, the standard for substantial human involvement is lower than that required by courts in the US.

[79] Beijing Internet Court Civil Judgement (2023) Jing o491 Min Chu 11279, p.19.

4.1.2 Copyright infringement by AI

Another problem brought about by artificial intelligence is its ability of to generate copies and variations of existing work has also facilitated copyright infringement and yet the current legal framework in Uganda governing copyright does not provide for who will be held liable for such infringement. For example, the emergence of artificial intelligence technology has led to the generation of large data banks of copyrightable works. The liability for AI generated copyright infringement involves multiple parties; generative AI service providers and the AI users. The attribution of liability for copyright infringement by AI-generated content is a complex issue due to the lack of clear rules and consensus in legislation and academic views. Various entities could potentially bear liability, and the principle of correspondence between the risks, benefits and responsibilities is suggested to guide the attribution of liability.

4.2 Liability of copyright infringement across the cyber space

With the emergence of digital era such as the internet, social media and mobile devices, there is easy dissemination which has given rise to the quick and widespread reproduction, distribution and access to copyrighted materials in digital formats within the cyber space. The advancement in technology across the cyberspace has also made it hard to enforce copyright infringement liability where work is copied across the internet. There is no legal framework that clearly pronounces itself on who will be responsible. Will it be the party who dispatches the work, the party who received it or the internet service provider?

Internet service providers play an integral role in enabling the use of the internet. This is because they act as intermediaries and provide the network services that enable users to connect to the internet. Many ISPs also provide their subscribers with space on their servers so that they can create and maintain their own websites.

In other jurisdictions, people usually choose to sue the ISP rather than the person who actually posted the infringing material. This is because unlike Internet users, ISPs are relatively easy to locate. While the structure of the Internet allows a user who downloads copyright material anonymity, the ISP is relatively easy to find. Secondly, an action against a corporate ISP may also provide for a greater possibility of financial compensation than an action against an individual

user. Extending liability to ISPs may also provide incentives to block access to copyright material or to remove copyright material located on its servers.

There are problems, however, with extending liability to ISPs that act as mere conduits for subscribers to access the Internet. Most of the technical processes involved in the transmission of information are automated and the ISP may be unaware of the copyright material at the time it is transmitted.

In Europe, the European Union outlined the criteria for liability to be imposed on ISPs in different situations of copyright infringement. The EU adopted Directive 2000/31/EC, which outlined the liability to be imposed on ISPs in different situations.[80] Article 12 of the Directive provides ISPs with an exemption from liability where they act merely as conduits to the transmission of information. Article 12 states that where an ISP's service "consists of the transmission in a communication network of information provided by a recipient of the service, or the provision of access to a communication network," the ISP will not be liable for the information that is communicated. To be afforded protection under this clause, however, the ISP must ensure that it does not initiate the transmission, select the receiver of the transmission, or select or modify the information contained in the transmission.

The Directive broadens the term "provision of access" to include "the automatic, intermediate and transient storage of the information transmitted in so far as this takes place for the sole purpose of carrying out the transmission in the communication network, and provided that the information is not stored for any period longer than is reasonably necessary for the transmission." This clause ensures that an ISP can operate efficiently by allowing it to perform the necessary technological function of temporarily storing the information on its server as the information is transmitted. This Article does not, however, prevent the denial of service by an ISP to a subscriber who has been found transmitting or receiving infringing material.

The Directive also limits liability to ISPs that offer hosting services to their subscribers. Article 14 of the Directive states that liability shall not be imposed where information is stored by the ISP at the request of a subscriber provided that the ISP does not have actual knowledge of illegal activity

[80] C. Council Directive 00/31 of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce. [2001] O.J. L. 178/1.

or material and that "upon obtaining such knowledge ... acts expeditiously to remove or to disable access to the information."

The United States has also enacted legislation attempting to balance the rights of ISPs and users of the Internet. The DMCA, discussed above, provides "safe-harbors" for ISPs. Section 512(k)(l)(A) of the DMCA limits liability for ISPs that merely act as conduits for users to connect to the Internet. The requirements for protection include that the user initiate the transmission, the process be automatic, that the ISP not select the recipient, that no copy is maintained by the ISP, and that the material is not modified in transit.

The DMCA also protects ISPs that provide storage services for users on their servers. Section 512(c) of the DMCA protects ISPs from liability where there is no actual knowledge of infringing material, the ISP is unaware of facts that make infringement apparent, and the ISP acts expeditiously upon notice to remove or block access to the infringing material.

However, these safe harbors apply only if the ISP has adopted and reasonably implemented procedures to terminate the service of repeat infringers. The safe harbor provisions provide a complete bar to monetary damages and restrict the availability of injunctive relief while maintaining the fair use doctrine. Section 512(c)(3) also provides for detailed notice and take-down procedures to facilitate the requirements under s. 5 I 2(c). To discourage unfounded take-down notices, s. 512(c) also ensures that misrepresentations with regards to take-down notices are actionable.

In Uganda, the Copyright and Neighboring Rights Act is silent with regards to the liability that will be imposed on ISPs where they provide web site hosting services and are found to be hosting infringing material on their servers. Unlike the EU Directive and the American DMCA, which address the requirements of actual knowledge and notice and take-down provisions, Ugandan ISPs do not have the comfort of legislative guidance as to their obligations with respect to these issues under the Copyright and Neighboring Rights Act.

Additionally, amending the Act without addressing these issues would further place ISPs in a precarious position. If the Parliament of Uganda implements an amendment to the Copyright and Neighboring Rights Act that prohibits the dissemination of hardware or software that is designed to circumvent encryption technology, ISPs could potentially be held liable for a breach of this

legislative scheme. For example, if an Internet user posted a piece of illegal software onto his web page, hosted by his ISP, the ISP could potentially be held liable for housing the illegal program on its server and making it available to the public.

In order to protect ISPs from such liability where they have no knowledge of the infringing activity, Uganda must ensure that limited ISP protection is provided in its laws as part of a potential statutory scheme, much like provisions in the DMCA in the United States. Holding ISPs responsible for material present on their servers and available through web pages they host would burden ISPs with the task of policing their servers for pirated material. This would add expense to providing Internet service, which could subsequently be passed onto the end user, limiting Internet access for many individuals.

"Inflicting strict liability standards on OSPs [Online Service Providers] where they act as passive carriers and cannot, through reasonable effort, be aware of the nature of the content transmitted via their systems, would substantially affect their cost of providing services and may drive many out of business."

The Parliament of Uganda must address the serious issue of ISP liability with legislative change. Legislation should consider the obligations of ISPs in different situations and provide a framework for notice and take-down procedures. The legislative changes must also consider the liability of ISPs where procedures have not been followed and the liability on users who make misrepresentations on notices to ISPs of infringements. These are issues that cannot be adequately addressed by simply interpreting current provisions of the Copyright and Neighboring Rights Act. Relevant legislation must strike an adequate balance between limiting liability on ISPs, while requiring that they have procedures in place to remove infringing material once they become aware of such material.

4.3 RECOMMENDATIONS

4.3.1 Introduction

Copyright law in Uganda has not evolved to explicitly address and regulate the copyright-related issues emerging artificial intelligence technologies. Instead of sitting back and waiting for the courts to grapple with the questions of copyright ownership in works generated by AI, it is time that Uganda starts to think about the legal complexities that artificial intelligence poses that are not addressed in its Copyright and Neighboring Rights Act.

4.3.2 Recommendations

Uganda should consider updating its Copyright and Neighboring Rights Act[81] to ***address the ownership and protection of AI generated works.*** It is that crucial that Uganda establishes a clear legal framework on whether AI generated content can be copyrightable in this our jurisdiction. This will enable Uganda to keep pace with technological advancements and ensure fair treatment of creators and innovators.

In my view, although historically, copyright protection only accrues to works produced by a physical person[82], with the emergence of AI (which is still rapidly developing and going nowhere), I urge the lawmakers in Uganda to also enact laws that protect portions of AI generated works which have *attributable or sufficient human input arising to the level of originality*. This is because there are complexities in applying traditional copyright law to AI-generated works as has been witnessed in jurisdictions like the USA. For those works created autonomously by AI systems without human input, I recommend that they be placed in the public domain. This approach aims to balance innovation and creativity while ensuring fair protection for both human creators and AI systems.

I also recommend that The Copyright and Neighboring Rights Act ***be amended to clearly define the guidelines or criteria to ascertain who owns copyright for AI -generated works;*** whether it is

[81] The Copyright and Neighbouring Rights Act, 2006.
[82] S.2.

the creator of the AI system, the user, or the developer who trains the AI model. Jurisdictions like the US and China have already set some precedents that Ugandan lawmakers may consider making reference to. Should the Parliament of Uganda consider protecting AI generated works, the law should also be amended to provide clarity on who owns copyright in AI generated works and the criteria to be followed to ascertain the owner. This will encourage innovativeness and creativity.

I also recommend that The Copyright and Neighboring Rights Act be ***amended to clearly define the attribution of liability for copyright infringement by AI-generated content.*** Although, this is a complex issue due to the lack of clear rules and consensus in legislation and academic views, various entities could potentially bear liability, and the principle of correspondence between the risks, benefits and responsibilities is suggested to guide the attribution of liability. Where there are clear criteria that attributes liability for copyright infringement, creatives and innovators of works are certain on who to bring claims against to recover compensation.

The Copyright and Neighboring Rights Act must also ***be amended to provide for clear legislative guidance and the obligations of ISPs and their respective obligations in respect to online copyright infringement*** because the current the Copyright and Neighboring Rights Act is silent about these issues. The Act does not address issues with regards to the liability that will be imposed on ISPs where they provide web site hosting services and are found to be hosting infringing material on their servers. Uganda should borrow a leaf from the EU Directive and the American DMCA.

The Copyright and Neighboring Right Act must also ***be amended to provide a framework for notice and take-down procedures. The legislative changes must also consider the liability of ISPs where procedures have not been followed and the liability on users who make misrepresentations*** on notices to ISPs of infringements. These are issues that cannot be adequately addressed by simply interpreting current provisions of the Copyright and Neighboring Rights Act. Relevant legislation must strike an adequate balance between limiting liability on ISPs, while requiring that they have procedures in place to remove infringing material once they become aware of such material.

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