

## ROLE OF COPYRIGHT IN DIGITAL COMMUNICATION TECHNOLOGIES AND HUMAN RIGHTS

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#### Abstract

In the arena of Digitalization, where every communication takes place through online platforms, it is significant to investigate the changes in dimensions for encryption policies and copyright policies following the current trends so that the rights and privileges of the individuals are safeguarded from infringement.

Intellectual Property deals with intangible products that cannot be retrieved back if infringed. For instance, if we talk about copyright and Human rights, which have evolved from two different areas that have no connection previously but with recent amendments in both sections, a link arises irrespective of the creation of ideas where copyright exists as protection. Still, in digital mediums where digital information can be easily copied at a low minimum cost, encryption has taken place to safeguard the materials on the internet so that illegal use of materials does not occur.

In this paper, the authors focus on the recent trends in Digital media and IP perspectives of Human rights in Information Technology.

Keywords: Copyright, Intellectual Property, Information Technology, Human Rights, Encryption.

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## 1. INTRODUCTION

In Digitalization, where every person deals with certain forms of information science must keep a deep connection with Intellectual Property and Encryption under Information Technology. When it comes to copyright and human rights, either arose from separate isolations while attempting to reconcile them. By giving sole ownership for a specified duration, copyright law stimulates the creation of literary work. It works on the premise of 'Quid Pro Quo,' which translates as 'give and take.' An author contributes a creative work to society and retains exclusive rights to it briefly before it enters the public domain. Human rights are no longer explicitly implicated in copyright law. Still, copyright law protects the financial freedoms of authors in digital media, which recognizes as a human right. Consequently, it makes it possible for authors to profit from the benefits of their tireless efforts over time.

Standard law regarding copyright was successful before the introduction of digital media. Numerous communication challenges ripped utilizing the growth of internet-based mediums, and the expense of manufacturing new reproductions lowered to nothing. It has enabled copyright holders/authors to create an effective system for financially exploiting their works. Text, software, music, or videos are examples of digitally transferred content. Digital ownership rights are the rights that those with a copyright have on electronic media. Such rights are not dissimilar to the traditional rights held by copyright holders.

Therefore, copyright must connect with the anti-circumvention laws to protect human rights in a digital medium, which will address through judicial precedents.

Thus, it may show the dilemma to reach two very different facets, i.e., the necessity to safeguard authors' human rights through copyright and protection of significant growth of public threatened by copyright got a balance situation. A proper balance must be there to safeguard the massive growth of copyright in technological mediums.

## 1.1. Overview of Intellectual Property

Worldwide trade and commercialization play an enormous role in increasing the viability of recognizing the products to the international standards in the Indian state of Kerala plays an essential role in the commercialization of spices throughout India and foreign countries. In 1991, it molded the practice of trade and commerce into a new technological age due to a competitive market. Intellectual property is crucial as it safeguards the economic rights of the people as a fundamental Human right. It has to identify and analyze the components of Intellectual Property for defending the fundamental rights of humans.

The term Intellectual Property deals with Intellectual Products, which can categorize into two different forms: "Intellectual Component and the second is Physical Component.

The intellectual component is the intangible part of the product, i.e., the creative work – The ideas, concepts, discoveries, and the expression of these elements are protected by copyright. The physical component is the expression of the work reproduced in a physical medium. Now, consider the sequence of events involved in creating and publishing a book and subsequent use of that book.

As we all know, IPR recognizes the creation and expression of ideas in the mind; therefore, both components help safeguard human rights.<sup>1</sup> The term property can classify into two different types: Tangible property and Intangible Property.

Intellectual Property safeguards the right of the creator's inventors based on "Article 27 of Universal Declaration of Human Rights (UDHR)."

Globally, IPR was first legalized in 1883 in the Paris Convention for the Protection of Industrial Property. Later in 1886, in the Berne Convention for the Protection of Literary and Artistic Works. The World Intellectual Property Institution (WIPO) is the core organization enforcing both conventions. WIPO is one of the United Nations Organization's Seventeen agencies, established in Geneva, Switzerland, to promote innovativeness for the economic, social, and cultural development of all countries through a balanced and effective international intellectual property system.<sup>2</sup>

We can segregate IPR into two different types,

- 1. Industrial Property includes artistic rights, scientific inventions, performer's rights, etc. Various IP Laws are there to safeguard the industrial property
- 2. Copyright- over here, IP. is considered a reward for safeguarding the economic rights of the authors/ creators as fundamental human rights.

Intellectual property has the following characteristics:

1) It is intangible property.

2) It exists apart from the tangible articles or commodities that contain the protections.

3) In a few instances, rights can exist and be enforced despite the lack of a tangible form.

4) The various rights are founded on the same tenets. Patents, design rights, and trademarks, for example, could all be used to safeguard a document—pictorial trademarks protected by copyright.

<sup>&</sup>lt;sup>1</sup> Rajkumar S Adukia, 'HANDBOOK ON INTELLECTUAL PROPERTY RIGHTS IN' 123.

<sup>&</sup>lt;sup>2</sup> World Intellectual Property Organization - 2008 - WIPO Intellectual Property Handbook..Pdf' <a href="https://www.wipo.int/edocs/pubdocs/en/intproperty/489/wipo\_pub\_489.pdf">https://www.wipo.int/edocs/pubdocs/en/intproperty/489/wipo\_pub\_489.pdf</a>> accessed 8 March 2022.

## 2. COPYRIGHT LAW- NEEDS IN THE SOCIETY- IN DIGITAL MEDIUM PERSPECTIVE

The Copyright Act, 1957 came into effect in January 1958. This Act has been amended six times to date. Copyright would be granted for an original work of authorship expressed on a tangible medium. The work created might be a musical, artistic, dramatic, motion picture, sound recording, etc. Suppose the work falls into one of the subject matter categories and expresses on a tangible medium. In that case, the author gets a bundle of exclusive rights, including the right to reproduce, distribute, do derivative works, adapt, abridge, etc. The exclusive rights granted to the author are not unlimited. There are exceptions in the form of fair use, first sale, compulsory licensing, etc. Through these exceptions, the copyright law tries to balance the exclusive rights of authors and the rights of the public to use copyrighted works.

Traditional copyright law was functioning efficiently until the advent of digital media. The evolution of digital media has broken many communication barriers and has reduced the cost of producing new copies to zero. It has allowed copyright owners/authors to develop a proficient system of commercially exploiting their works. Subject matter that can be transmitted digitally includes text, software, audio, and video. The rights possessed by copyright owners on digital media are called digital rights. Such rights are not different from the traditional rights owned by a copyright owner. Anti-circumvention laws provide strong protection to the copyright owners but they deprive the public of the rights they have over the copyrighted works. As circumvention would be illegal, any such measures to make fair use of the work would also be illegal, thus depriving the public of their right to free use. Therefore, the anti-circumvention laws give rise to a conflict in this modern era which springs bad consequences. The world is today struggling to find an amicable solution to this problem. Under such circumstances, this article explores the need for an anticircumvention law in India and other developing countries.

Therefore, in the digital medium, some treaties are there to safeguard the protection, firstly WIPO Copyright Treaty or better it is known as WCT.

## 2.1. WIPO Copyright Treaty (WCT)

WCT is a specific arrangement under Berne Convention for the Protection of Literary and Artistic Works Article 20. It enacts to develop and maintains the most effective and standard protection of authors' rights in their literary and creative works. Article 111 of the WCT specifies members' duties in terms of technical measures. According to Article 11, contracting states must provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures used by authors in connection with the exercise of their rights under the WCT or the Berne Convention. It restricts acts in respect of their works. They have not been allowed by the authors or are not permitted by law.

Article 12 of the WCT<sup>3</sup> specifies member nations' duties concerning Rights Management Information. According to Article 12, member states are required to provide adequate and effective legal remedies against anyone who knowingly induces, enables, facilitates, or conceals the removal or alteration of any electronic rights management information without authority.

As well as knowingly inducing, enabling, facilitating, or concealing the distribution, import for distribution, broadcast, or communication to the public, without authority, of works or copies of works."

- "Article 11 of WIPO Copyright Treaties: Obligation of state parties concerning "technological measures": Contracting Parties shall provide sufficient effective recognition and effective legal remedies for the circumvention of effective technological measures used by authors in correlation with the event of a lawsuit under this Treaty or the Berne Convention and that confine acts about their works that are not empowered by the authors concerned or permitted by law.
- "Article 12 (2) of WIPO Copyright Treaty (WCT) defines Rights Management Information": information which identifies the work, the author of the work, the owner of any right in work, or information about the terms and conditions of use of the work, and any numbers or codes that represent such information, when any of these items of information is attached to a copy of a work or appears in connection with the communication of a work to the public.
- Obligation State Parties to Provide Legal Protection to RMI: (Article 12 (1): contracting states are under obligation to provide legal mechanisms for any removal or alteration of any of the foregoing information, as well as the distribution or transmission to the public of copies of work containing such deletions or modifications
- India and Copyright Act, 1957: Though India has not adopted WCT, it has amended the Copyright Act 1957 by inserting two parallel provisions to this effect.

## 3. INTERNATIONAL INSTRUMENTS AND CONFLICTIONS IN HUMAN RIGHTS

While we consider intellectual property rights, we assume capitalism and creativity, and it is so much beyond. The next frontier to be explored is intellectual property and human rights. While safeguarding copyright is essential for protecting the owners' rights as individuals, it also becomes necessary to figure out how much it conflicts with anyone else's human rights. Various rights of individuals are frequently infringed on by safeguarding copyright, as is listed here and elsewhere.

1. Right to Establish: When copyright guarantees the creator of an original, literary, or creative work the right to protect their work from infringement or replication, it deprives others of the freedom to borrow that work. There are times when it must balance copyright protection

<sup>&</sup>lt;sup>3</sup> 1997 - WIPO Copyright Treaty (WCT) (1996) with the Agree.Pdf' <a href="https://www.wipo.int/edocs/pubdocs/en/wipo\_pub\_226.pdf">https://www.wipo.int/edocs/pubdocs/en/wipo\_pub\_226.pdf</a>> accessed 8 March 2022.

against the public's intellect, which must be disseminated as quickly as possible for a massive advantage. However, the principles governing the concept of expression contradiction may remedy this dilemma. On the other hand, there exist regulations related to caricature, fair use, and so on, which can provide the artist considerable flexibility in creating new work by adopting something from the original author's work.

- 2. Right to Expression: "Article 19 of the Universal Declaration of Human Rights states that every human has a constitutional right to freedom of speech." The right to freely speak for oneself is called freedom of speech and expression. The connection involving copyright and free expression has always been contentious. Several claims the two cannot be reconciled. In contrast, others argue that both operate in completely distinct spheres and have no connection. However, resolution is critical since both rights are critical to the continued development of a society. The first case brought before the ECHR was Ashby Donald and Others v France,<sup>4</sup> which dealt with France's freedom of expression and copyright law. However, they filed no suit. The court stated that unauthorized copying of public communication protected by copyright should deem an infringement on freedom of speech. "Article 19 of the Indian Constitution provides freedom of opinion and speech while embarking limitations." It is critical to stress that copyright is not a constraint on basic freedoms of expression and communication.<sup>5</sup> The expression of an idea, rather than the expression itself, is protected by copyright legislation unless someone has no desire to steal from the work of others.
- 3. Right to Knowledge: It is the foundation stone upon which the growth of any human civilization is based. It may demonstrate the significance of education because it recognizes as a fundamental human right in most international treaties. The Constitution of India acknowledges the right to free and compulsory education as a fundamental right & governing idea. People now have access to considerable knowledge due to breakthroughs in computer technology, enabling them to close gaps in knowledge. The contradiction involving copyright and access to knowledge exhibits itself in a couple of areas. However, whoever possesses educational information in which authors have an intellectual interest that is also one of the most trusted sources for information is an issue of contention worldwide. Despite the fact the contents of the Rameshwari photocopy case<sup>6</sup> gained the children in question, it attracted national interest to the issue. Ownership provides a rationale for the prohibitive costs and scarcity of educational resources. Even though the Indian Copyright Act has an assortment of exceptions and limitations for dealing with this issue, it continues to impede the offering of learning resources to the general public. Additionally, as the laws regarding online copyright

<sup>&</sup>lt;sup>4</sup> Kluwer Copyright Blogger, 'ECHR: Copyright vs. Freedom of Expression' (*Kluwer Copyright Blog*, 25 January 2013) <a href="http://copyrightblog.kluweriplaw.com/2013/01/25/echr-copyright-vs-freedom-of-expression/">http://copyrightblog.kluweriplaw.com/2013/01/25/echr-copyright-vs-freedom-of-expression/</a> accessed 8 March 2022.

<sup>&</sup>lt;sup>5</sup> Buss Krisjanis, 'Copyright and Free Speech: The Human Rights Perspective' (2015) 8 Baltic Journal of Law & Politics.

<sup>&</sup>lt;sup>6</sup> The Chancellor, Masters & ... vs Rameshwari Photocopy Services & ... on 9 December, 2016' <a href="https://indiankanoon.org/doc/114459608/">https://indiankanoon.org/doc/114459608/</a>> accessed 8 M

protection become more stringent, another difficulty emerges: the internet can distinguish between a typical user and one who falls under any of the exceptions provided in the Copyright Act.

4. Right to Access to Knowledge: The public interest is recognized as a fundamental right, and the courts have even said that it is one of the cornerstones of a democracy. In *"R.P. Limited v. Indian Express Newspaper*<sup>7</sup>, the courts interpreted Article 21 to include the right to know as a necessary condition for representative democracy." The modification or openness may efficiently conflict against the copyright since it may infringe, limiting an author's economic and social rights if his work is available on a website; still, excessive constraints on the availability of protected information might hamper societal growth. Several parts of the Indian Copyright Act addressed the problem & aim to reconcile the competing interests of various parties, such as those dealing with fair use, licensing agreements, idea expression, etc. Strenuous legal protection can undeniably limit the right to information. Still, the two may live together if suitable exceptions and constraints are adopted.<sup>8</sup>

# 4. INFORMATION TECHNOLOGY HAS A PIVOTAL ROLE IN THE PRIVACY AND ENCRYPTION OF ONLINE MEDIA.

Digital Libraries are connecting networks<sup>9</sup> of digital resources, research papers, photos, sounds, data, software, and other resources that serve as the foundation for computer networking and the future's globally accessible online databases of all kinds. Many information systems in India are now using the term "Digital Libraries" loosely or erroneously. When a nutshell, we must thoroughly comprehend the idea to avoid ambiguity as we build or develop a wholly justified digital library in the technical meaning of the term.

For digital libraries,<sup>10</sup> there is unparalleled technical assistance and infrastructural availability. There is also a considerable amount of digital material, both scholarly and commercial, that is spread and distributed over the Internet and kept in various databases and archives around the world. The digital library project will need a considerable investment of time, energy, human

<sup>&</sup>lt;sup>7</sup> Reliance Petrochemicals Ltd vs Proprietors Of Indian Express on 23 September, 1988' <a href="https://indiankanoon.org/doc/1351834/">https://indiankanoon.org/doc/1351834/</a>> accessed 8 March 2022.

<sup>&</sup>lt;sup>8</sup> Seash Chandra, 'NEW DIMENSION OF HUMAN CREATIVE ACTIVITIES AND THEIR PROTECTION UNDER COPYRIGHT LAW A STUDY IN THE LIGHT OF HUMAN RIGHTS' [2010] University <a href="http://shodhganga.inflibnet.ac.in:8080/jspui/handle/10603/33710">http://shodhganga.inflibnet.ac.in:8080/jspui/handle/10603/33710</a>> accessed 8 March 2022.

<sup>&</sup>lt;sup>9</sup> 'Digital Library Initiatives and Issues in India: Efforts on Scholarly Knowledge Management' <a href="http://dspace.iimk.ac.in/xmlui/handle/2259/254">http://dspace.iimk.ac.in/xmlui/handle/2259/254</a>> accessed 8 March 2022.

<sup>&</sup>lt;sup>10</sup> Wherry - 2008 - Intellectual Property Everything the Digital-Age .Pdf' <a href="https://libres.uncg.edu/ir/uncg/f/L\_Kellam\_Intellectual\_2009\_Embargoed%20until%20October%202010.pdf">https://libres.uncg.edu/ir/uncg/f/L\_Kellam\_Intellectual\_2009\_Embargoed%20until%20October%202010.pdf</a> accessed 8 March 2022.

resources, and, of course, money. In addition, digital libraries now have unparalleled access to technical assistance and infrastructure.

## 4.1.Intellectual Property Rights (IPR) and digital human rights

The following are the significant issues to be considered: Is it appropriate to compare digitization to reproduction? Is it feasible to determine if the dissemination of digital resources through the Internet is commercial distribution or public communication in the same way that broadcasting is? What are the issues of the library community? How might the general public practice fair use in the digital setting if the copyright owner limited access?

Will all these activities be carried on in the digital age? Digitization and reprography are both related activities. There will be no participation of creativity in Digitalization, and the copyright will solely protect creative works. The transmission of information through the Internet is analogous to transmission. Is it feasible that it will carry on all of these activities in the digital age? Digitization and reprography are two operations that are closely connected. Digitalization entails no originality because copyright only protects creative works. Transmission is similar to data transfer through the Internet.

## 5. METHODS FOR DIGITAL PROTECTION/DATA PROTECTION MANAGEMENT (DPM)

The systems (also known as Electronic Rights Security Solutions) safeguard copyright by identifying and preserving material, restricting access to the work, ensuring the work's integrity, and charging for access. DRM technology identifies and protects digital content, as well as providing access and the work's integrity. If an author wishes to apply DRM, they may do so.

## Cryptosystem:

Encryption technology is the most ancient mechanism for guaranteeing the safety and confidentiality of data sent through networks including scrambling (or encrypting) the data (or decrypting). In contrast, cryptography merely safeguards the work during transmission or dissemination. It does not save after encrypting the work.

## Technology for Digital Watermarks:

Watermarking is a symbol or pattern that is included in a data file. It is like the electronic on-screen emblem used by television broadcasters. The system consists of a watermark generator, programs that enable it, and a watermark detector decoder.

## Electronic Signatures Technology:

A biometric system contains the transmission and receiving identities, date, time, and any distinctive passcode. It may consist of this data in digital products. As a result, it is electronically

tagged and links a software application to a specific client. Crypto graphically signed biometric ensure the authenticity of documents and prevent illegal replication.

## Automated Flagging:

In this technique, the technology makes a special sign that is instantly connected to each document copy. In cases when documents have been printed, copied, or faxed, this methodology protects intellectual property and electronic publishing.

## 6. CONCLUSION

It becomes increasingly challenging to prove rights violations when they occur in the digital environment. Because copyright provides certain minimum safeguards to creators over their creations, extending legal protection rewards creativity. Copyright protection should encourage creativity rather than create barriers to information use. It must amend the copyright law in this context.

Though copyright law is restrictive and harmful, legislators have attempted to develop an appropriate and viable balance between copyright holders' interests and society's interests through provisions and exceptions. Copyright law allows for the use of the work without restriction if it is used for research, reporting current events, judicial proceedings, or non-profit purposes. Copyright protection should promote instead of discouraging the use of such data for creative purposes. Librarians should continue to act as enablers of open knowledge transfer between consumers and copyright owners. The goal of copyright protection should be to promote creativity rather than to hinder data usage. Library professionals should function as a catalyst for the unfettered flow of information between information users and intellectual property holders.