

COPYRIGHT CHALLENGES IN CYBERSPACE

Author - DISHA KAR, STUDENT AT INDIAN INSTITUTE OF MANAGEMENT, ROHTAK

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ABSTRACT

Technology advancements have led to modifications in copyright over time. Because of the World Wide Web's (WWW) and the Internet's expansion, copyrights are now utilized in a new cyberspace. New opportunities and hazards are discovered when copyright in cyberspace is examined. Yet, these new developments also carry new dangers, many of which jeopardize the rights of those who possess copyright. These dangers frequently outweigh the opportunities provided by the internet. This suggests that more laws are necessary to safeguard copyright in cyberspace. Cyberspace is constantly evolving, making it challenging for the law to react rapidly. The most significant and contentious of the key Intellectual Property Rights (IPR) in cyberspace appears to be copyright. This has prompted international copyright regimes to urge for tighter regulation of internet. More international collaboration is required to control cyberspace and safeguard copyrights. This paper seeks to shed light on a number of challenges in the protection of copyright in the cyberspace which deserved closer attention & might be problematic in the future if not dealt appropriately.

KEYWORDS: Intellectual Property, Infringement, Digital Technology, Piracy, Copyright

Introduction

Cyberspace is the term used to describe the virtual computer world and, more specifically, a type of electronic medium that is used to support online communication. In order to facilitate communication and data exchange, cyberspace often consists of a sizable computer network made up of numerous

international computer subnetworks that use the TCP/IP protocol.

In the **USTR Annual Special 301 report**¹⁹, it is estimated that counterfeit and pirated goods account for 2.5 trillion dollars' worth of imports globally. Almost 60% of the world's population, or 4.66 billion people, were internet users as of October 2020, and that number is continually growing. Global Internet users are increasing at a yearly pace of about 7%, or more than 875,000 new users every day. India's audio OTT industry was worth \$250 million as of December 2020, and its weekly music consumption was 21.5 hours, which is more than double the global average of 17.8 hours.

Threats to copyright in cyberspace increase as technology develops. In today's entertainment, information, and technological environment, intellectual property has grown in significance. As network and Internet technologies develop, the scope and variety of IPR infringement grow. One of the most significant categories of intellectual property rights is copyright, which has been significantly impacted by technology and the Internet. Giving up on the Internet as a means of resolving copyright issues is not an option because it is essential to daily life, including commercial activities. From their creation, copyright rules have changed in reaction to technical developments. Like many technological developments, these tools hold both promise and the potential to be harmful to many parties engaged in the use and exploitation of creative works, from books and music to movies and websites. With regard to recent developments, there is no doubt that it

¹⁹ <https://ustr.gov/issue-areas/intellectual-property/special-301>

will be difficult to strike the proper balance between these interests, which are legitimately considered "new" or "unique."²⁰

What the cyberspace internet has to do with copyright

In the same way as the owner of a piece of land owns everything on it, including the sky and the ground, copyrights are a type of property right. The same principles underlie copyright, however there are a few restrictions. The use of computers and the internet, including downloading, uploading, copy-and-paste, deep linking, and peer-to-peer file sharing, makes it more difficult to enforce copyright in cyberspace.²¹ The development of information has led to the emergence of new forms of artistic expression, all of which are covered by copyright protection. Copyright work protection consistently challenges the core tenets of copyright law in the digital world. One of them is the online infringement of copyrights. Whether the issue is social, economic, or technological, law is a solution. Copyright law is likewise subject to this basic norm.

The Internet is the perfect platform for authors and artists to promote their work since it is so simple to transmit from creator to viewer and then from viewer to viewer. Technology also makes it possible for any of these viewers to swiftly and easily modify, alter, distort, or distribute an original work without the author's consent. The "digital problem" is a copyright conundrum brought on by the internet and digital technology.²² Digital technology enables users to generate a limitless number of flawless digital copies of music, books, or videos, which they can then transmit via the internet at the speed of light throughout the whole world. Digitalization has given the issue of copyright on the internet a new perspective. It makes it

simple, affordable, and rapid to create high-quality copies that can be transmitted in a matter of seconds to potentially millions of individuals.

Only when someone carries out one of the many actions that the copyright owner has the only authority to do, such as manufacturing the work in any tangible form or storing it in any media using technological means, does a copyright violation occur. It is an infraction to digitize a work without the owner's consent. A global mechanism for transmitting and copying information is the internet. This presents a number of issues for copyright law and makes it conceivable for copyright to be disturbed in ways that no one could have anticipated before.

Some of the characteristic features of digital technologies in the cyberspace which have a need to be copyrighted include the likes of

Ease of Reproduction—Once a piece of art has been produced digitally, it may be rapidly, cheaply, and accurately duplicated. The duplicates can then be made more than once without sacrificing quality. In this way, millions of people can have access to a single digital copy of a work.

Ease of Dissemination—The development of international digital networks has made it possible for digital works to be quickly and widely disseminated. Social media platforms and other digital networks make it possible to disseminate content to a large audience from a single spot (although, unlike broadcasting, digitised materials need not reach each individual simultaneously). On the other hand, digital networks enable each network user to take part in additional transmission of the work, enabling it to expand at a geometrical (sometimes referred to as "viral") rate. A single digital copy of a work can be reproduced thousands of times throughout the world in a couple of hours as a result of this and how simple it is to copy works. *Ease of Storage*—Digital storage is compact, and it keeps getting

²⁰ <https://www.pewresearch.org/internet/2021/02/18/experts-say-the-new-normal-in-2025-will-be-far-more-tech-driven-presenting-more-big-challenges/>

²¹ Johnson, D. R., & Post, D. (1996). Law and Borders: The Rise of Law in Cyberspace. *Stanford Law Review*, 48(5), 1367–1402. <https://doi.org/10.2307/1229390>

²² Land, R., & Bayne, S. (2006). Issues in cyberspace education. *Problem-based learning online*, 14-23.

more compact. More and more material can be held in a smaller and smaller amount of space.

Challenges arising in dealing with copyright in cyberspace

The **State of Internet Video Report 2020**²³ states that as of December 2020, users in India watched the most online video, on average 10 hours and 54 minutes each week, surpassing the global average by 3 hours. As a result, in the current digital era, copyright protection has become extremely difficult due to the rise of new categories and types of works like software, digital music, movies, and OTT platforms (music and video). Copyright-related problems and infringement in the digital sphere can be handled affordably, easily, and even without sacrificing quality. However, that is not the case more often than not. Even after implementation of specific laws related to such matters such as the Copyright Act, which came into force as early as 1957, cases related to copyright infringement have only grown in recent years and has largely remained untackled.

A. Challenges in copyright with respect to digital technologies

1. Digital piracy

With the rise of the internet, it has become easier than ever to copy and distribute digital content such as music, movies, and books. This has led to a surge in digital piracy, where copyrighted content is shared without permission or compensation. This has had a significant impact on the revenue streams of creators and rights holders, and has made it difficult to enforce copyright laws in cyberspace.

Copyright law is designed to encourage innovation by providing creators with a financial incentive to create. When piracy is rampant, it can discourage creators from investing time and resources into creating new works, since

they may not be able to recoup their investment. When pirated copies of copyrighted works are readily available, the market value of the work may be diminished.²⁴ This is because the supply of the work has been artificially increased, which can drive down the price of legitimate copies and reduce the incentive for people to purchase them.

Piracy has significantly harmed the general status of the economy, which has suffered a loss of jobs and income, in addition to impacting the due profits of legitimate copyright owners. Due to the pervasiveness of digital media and the resulting exponential growth in the number of pirates, copyright owners are unable to identify the infringers, making digital piracy particularly dangerous and challenging to stop. Due to the anonymous nature of online piracy, it is difficult for IP owners to identify the infringers and take action against online pirates.

2. Digital rights management

Digital rights management (DRM) is a set of technologies and techniques used to control access to digital content and prevent unauthorized copying and distribution. However, DRM has been criticized for being overly restrictive and for limiting the ability of users to engage with digital content in meaningful ways. This has led to calls for more flexible and user-friendly DRM systems.

Distributed Generation of Media (DGM) is a concept that challenges the traditional copyright model by advocating for a more open and decentralized approach to media distribution. DGM encourages the sharing and collaborative creation of content, which is in direct opposition to the strict control that copyright holders maintain over their intellectual property.²⁵ By allowing anyone to

²⁴ *Supra note 2*

²⁵ Shushaanth, S. and Prakash G, Aswathy, A Study on Copyright Infringement in Cyberspace with Special Reference to the Liability of the Internet Service Provider for Infringement (March 13, 2020). International Journal of Pure and Applied Mathematics, Volume 119, No. 17 2018, 1503-1516, Available at SSRN: <https://ssrn.com/abstract=3553588>

²³ <https://www.akamai.com/our-thinking/the-state-of-the-internet/state-of-the-internet-security-reports-2020>

contribute to and distribute media, DGM disrupts the traditional power dynamic between content creators and consumers. This model also challenges the traditional notion of ownership and the commodification of media, which can be seen as a threat to the profits of established media corporations. While DGM offers many benefits, including greater access to information and creative freedom, it also raises questions about the protection of intellectual property and the sustainability of media production in the absence of traditional copyright incentives.

3. Fair use and transformative works

The concept of fair use allows for the limited use of copyrighted material for purposes such as criticism, commentary, and education. However, the line between fair use and copyright infringement is often blurred in cyberspace, particularly with the rise of transformative works such as fan fiction and remix culture. This has led to ongoing debates about the scope of fair use in the digital age.

Fair use is a legal doctrine that allows for the limited use of copyrighted materials without the permission of the copyright holder. While fair use is intended to promote creativity and innovation, it can also be misused in copyright. Fair use is often misused when someone uses the entirety of a work or takes the heart of the work, when the use is for commercial purposes, when there is no attribution given to the original author, when the new work replicates the original work, or when the use negatively impacts the potential market for the copyrighted work. These actions can result in a violation of fair use and lead to legal consequences. It is important to carefully consider the four factors of fair use before using a copyrighted work without permission from the copyright holder to ensure that the use is truly fair and legal.

4. International enforcement

Copyright law is enforced on a national level, but the internet is a global phenomenon. This has created challenges for international enforcement of copyright laws, particularly in jurisdictions where copyright laws are weak or non-existent. This has led to ongoing debates about the need for stronger international copyright laws and enforcement mechanisms. International enforcement is a significant concern in copyright because copyright laws vary from country to country. This means that what may be legal in one country may not be legal in another. For example, a copyrighted work that is in the public domain in one country may still be protected by copyright in another.

Furthermore, with the rise of the internet, it has become increasingly easy to share copyrighted works across national borders. This makes it difficult to enforce copyright laws, as infringing activity can occur in one country while the copyright holder is based in another. This creates a need for international cooperation and coordination in enforcing copyright laws. In addition, copyright infringement can have a significant economic impact on copyright holders, and the international nature of copyright infringement can make it difficult for them to protect their rights and recover damages. This can create challenges for copyright holders seeking to protect their intellectual property rights on a global scale.

Therefore, effective international enforcement of copyright laws is essential to protect the rights of copyright holders and ensure that they are able to benefit from their creative works. It is also important to promote international cooperation and coordination in enforcing copyright laws to ensure that infringers can be held accountable regardless of where they are located.

i. Challenges in the existing laws governing copyright in digital space

Jurisdictional issues

The legal framework in India does not sufficiently define Internet jurisdiction. If a court lacks the authority to make a judgement, such ruling is meaningless and of no consequence. Subject matter jurisdiction and personal jurisdiction are the two different categories of jurisdiction. These two facts need to be true simultaneously in order to make a decision. Without this power, a court's ruling would be, to put it bluntly, suspect. It offers little to no assistance. It has long been believed that jurisdiction is determined by either the defendant's residence or the scene of the alleged wrongdoing. Yet, it is claimed that this is untrue for online transactions. It's difficult to demonstrate which of the two locations is the correct one. It has long been believed that jurisdiction is determined by either the defendant's residence or the scene of the alleged wrongdoing. Yet, it is claimed that this is untrue for online transactions. It's difficult to demonstrate which of the two locations is the correct one.

Copyright infringement suits can be filed in the district court having jurisdiction over the place where the plaintiff resides or carries on business or where the cause of action arises. However, if the cause of action arises in multiple districts, the plaintiff can file a suit in any one of those districts. This can lead to confusion as to which court has jurisdiction to hear the dispute. In cases where a copyright dispute involves questions of substantial importance, the High Court may exercise jurisdiction. However, the jurisdiction of the High Court can be complex and can vary depending on the specific circumstances of the case. Conflicts can arise when different courts have jurisdiction over the same copyright dispute. This can lead to delays and increased costs for the parties involved.

Evidentiary challenges

The way proof functions on the Internet has a lot of issues. Compared to the equipment required to produce several physical copies of tapes and discs, computers that can quickly duplicate

digital information are not that expensive. Because of this, it is particularly challenging to obtain end-user confirmation of copyright breaches over the Internet.²⁶ As a result, there is a great deal of piracy. Also, it is challenging to track down someone who downloaded intellectual property-protected content and later copied it in order to sell copies of it. Internet copyright infringement are difficult to detect because, unlike in the real world, they take place in secret online. According to **Section 64 of the Copyright Act**²⁷, police officers may conduct legal action against copyright violations even in the absence of a magistrate's order. Nonetheless, they choose not to, either because they lack the knowledge or concern to prosecute these offenses.

One of the key challenges in copyright cases is proving ownership of the copyrighted work. In India, copyright protection is automatic and does not require registration. Therefore, it can be difficult to prove ownership of a copyright if the work has not been registered. Proving infringement of a copyright is also a challenge as it requires demonstrating that the infringing work is substantially similar to the original copyrighted work. In cases where the infringing work is a derivative work, the line between permissible use and infringement can be blurry. In many cases, the evidence required to prove infringement, such as source code or design files, may not be admissible in court. This can be due to various reasons such as confidentiality or technical complexity. Hearsay evidence, i.e., evidence based on second-hand information, is not admissible in court. However, in some cases, hearsay evidence may be the only available evidence, which can make it difficult to prove infringement. In cases involving cross-border infringement, the admissibility and authenticity of evidence can become a challenge due to differences in laws and procedures in different countries. In cases where infringement involves technical or artistic works, expert evidence may

²⁶ Chowdhury, A. R. (2008). The future of copyright in India. *Journal of Intellectual Property Law & Practice*, 3(2), 102-114.

²⁷ The Copyright Act, 1957, § 64, Act No. 14 of 1957, (India)

be required to prove or disprove infringement. However, the admissibility and reliability of expert evidence can be challenged, making it difficult to rely on such evidence in court.

Intermediary liability

Determining who is accountable—the party receiving the work, the Internet service provider, or the person transmitting the work—is crucial for imposing accountability. If the subscriber proves that the breach or crime was committed without the knowledge of a person or that a person used all reasonable diligence to prevent the conduct of such breach or crime, there is no liability under **Section 79 of the Information Technology Act of 2000**²⁸. An Internet Service Provider (ISP) must have knowledge of the infringement in order for it to be considered criminally responsible or complicit in the infringement; otherwise, the ISP is exempt from prosecution.

Due to the fact that the Internet is a global phenomenon, a person will only be held responsible if any online behavior is deemed illegal under local law. This makes it very challenging to regulate because the message would travel through several different countries before it reached its intended recipient. As a result, the ISP might not be held accountable in the country of origin or destination, but might be in a transit country. Software developers may be liable for copyright infringement under secondary liability theories of contributory or vicarious infringement. A provider must either commit a direct copyright violation or an indirect copyright violation, such as through aiding or abetting a violation.

Judicial Perspective on Cyber Copyright Issues

Piracy is now a far more silent and secret activity than it was before the Internet, as was correctly noted in the case of **Religious Technology Center v. Netcom Online**

Communication Services Inc²⁹. Preventing such infringements has been harder as the Internet has spread to Computers and even mobile phones. Online copyrighted content authors face a number of challenges. The first priority is to police the internet.

In the case of **Microsoft Corporation vs Mr. Yogesh Papat and Anr**³⁰, Yogesh Papat and awarded Microsoft Corporation compensation in the amount of Rs 23.62 lacs against M/s Compton Computers Private Ltd and its executives for transferring stolen Microsoft programming in PCs that the organization sold after assembling parts.

The Delhi High Court ruled in **Super Cassettes Industries Ltd v. Myspace Inc and Anr**³¹. that the provisions of Section 79 of the Act and Section 81 of the IT Act had no bearing on copyright infringements relating to online wrongs when intermediaries are involved. As a result, the Copyright Act of 1957 still allows the copyright owner to sue the intermediary even though the intermediary is protected under Section 79 of the Information Technology Act. The Information Technology Act of 2000 attempts to regulate how intellectual property is disseminated, although not mentioning copyright or any other intellectual property rights.

In **UTV Software Communication Ltd. v. 1337X.TO**³² and Others, the Delhi High Court introduced a significant development in the form of a "dynamic injunction," under which the right-holders can issue blocking orders to ISPs without having to go through the drawn-out procedure of obtaining a court order. This case is another recent precedent-setting case that has influenced Indian law regarding the fight against online piracy. By virtue of this ruling, the plaintiffs are able to ask the Joint Registrar of the Delhi High Court to request that an existing

²⁹ Religious Technology Center v. Netcom Online Communication Services Inc, 907 F.Supp. 1361

³⁰ Microsoft Corporation vs Mr. Yogesh Papat and Anr, 118 (2005) DLT 580, 2005 (30) PTC 245 Del

³¹ Super Cassettes Industries Ltd v. Myspace Inc and Anr, MANU/DE/3411/2016

³² UTV Software Communication Ltd. v. 1337X.TO and Others ,2019(78) PTC 375(Del)

²⁸ The Information Technology Act, 2017, § 79, No. 21 of 2000(India)

injunction order against a website be extended to a linked "mirror/redirect/alphanumeric" website that has the same material as the already-blocked/injuncted website³³.

Suggestions and the way forward

It is crucial to register a copyright in order to protect the work from unlawful use or duplication since it serves as the strongest possible proof of the owner of the work and enables them to maximize profits through licensing, assignment, and capital raising. Although registration is not a requirement for copyright, it does prevent rights infringement. Hence, in order to safeguard the work and derive the greatest possible profit from it, copyright registration is highly recommended.

The fight against internet piracy is undoubtedly hampered by both global and regional issues in India (and beyond). The common difficulties include issues with international jurisdiction as well as cybercriminals' advanced technological capabilities. The systemic issues with the criminal justice system and law enforcement organizations, however, are the main components of the local challenges. Likely, the government of India can only handle the latter issue.

When publishing work online, a person could add a copyright declaration to help protect it. If someone sees their content being utilized without their consent, they should notify someone as soon as possible. Fast response to takedown requests may be helpful if legal action is ultimately required against the wrongdoer. Nonetheless, their work must be formally registered as copyright protected if they intend to pursue legal action beyond a "takedown" request.

Conclusion

Copyright law and the internet have a tangled connection. The aforementioned discussion leads to the conclusion that copyright owners

face a severe danger from the emergence of the internet. Since the advent of digital technology, copyright has expanded to include computer software and data compilations in addition to the traditional categories of books, music, painting, and motion pictures. The nature and method of copyright infringement have completely changed in the digital world. Digital technology's drawback is that it can lead to online copyright theft. Due to extra territorial jurisdiction, pseudonymous identities, diverse users from different countries, and the distinctive capabilities of the internet, among other factors, it is particularly difficult to prevent online infringement. The current laws in India on copyright and cyberspace are insufficient to stop copyright infringement online. Hence, there is a need for sufficient legislation, and individuals who are aware of their rights will defend copyright.

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