Pixel Wars: Copyright Infringement In The Gaming Industry: A Critical Analysis

Rachana Aluru
Student
School of Law
Christ Deemed to be University, Bangalore

Abstract: Gaming has been around since the 1970s, it is considered a creative work under copyright laws and is protected under various forms of copyright protection. It has taken a prominent stance in today's world regarding entertainment for all ages. It is also a billion-dollar industry, a lot of creativity, labour, and skill is involved in creating a game, and the profits reaped after the game gains popularity makes it a highly lucrative field of entertainment. This study would provide a thorough insight into the history and evolution of Copyright laws in the gaming industry. This Paper examines the different forms of protection provided under Copyright law worldwide, including the game's assets like the artwork, characters, sounds, mods, user-generated modifications, and the game software or code. Just like any other creative work, infringement occurs frequently in the gaming industry, including Asset theft, Game piracy, ROM Hacking, music copyright infringement, Streaming or video content without obtaining necessary permissions, fan-made games, and Game cloning. This Paper focuses on infringement of copyright protection and exceptions like the fair use doctrine and licensing agreements, which would protect the users from infringement cases. It also analyses solutions like Digital Rights Management (DRM), which helps the creator protect his creation from infringement, and Digital Millenium Copyright Act (DMCA) takedowns in the United States, which deals with removing infringing content. The Paper reflects on the international laws governing copyright in the gaming industry and the challenges faced to regulate the same. There needs to be more jurisprudence in gaming laws in India, as the industry was not given a lot of prominence. Still, it has seen a tremendous rise in the past few years and needs changes and modifications in the laws safeguarding copyright ownership in the gaming industry.

Index terms- Gaming, Game assets, Sounds, Artwork, Mods, Modifications, Infringement, Game Piracy, ROM Hacking, Streaming, Game cloning, Fair-use Digital Rights Management, Digital Millenium Copyright, and international law.
**Introduction:**

Video games have evolved throughout the years. The components involved in modern Gaming are developed with immense skill and labor as well as creativity in terms of artwork, sound design, coding, etc., which require a broad spectrum of protection to be provided to games. The idea and expression dichotomy also applies to Gaming as there can be ideas copied, but the idea itself cannot be protected under the Copyright law; it is just the expression protected under the law. For example, The concept of a game where two opposing teams have to plant and diffuse a bomb in each other's camp is an idea that can be expressed with different artwork, sounds, characters, etc. (Counterstrike and Call of Duty). Video games are sometimes created by people who reside in more than one country. Therefore, the problem of extraterritorial jurisdiction is always persistent in the gaming industry. The more complex these games get, the more areas or forms can be protected, giving more scope for infringing content. This is why creators need to take copyright protection seriously and for other creators to tread lightly, ensuring there is no possibility of infringement. It is also vital to understand not all acts can be called infringements. Some might also come under the exception of fair dealing—for example, criticism or reviews of video games.

The gaming industry has witnessed tremendous growth in recent years, with an ever-expanding market of developers, players, publishers, and licensees. With this development, protecting gaming work from infringement became a crucial issue. It is also the protection of all forms and spectrums of Gaming, which includes not just code but sound design, artwork, streaming issues, etc.; complex legal and ethical dilemmas are involved in the battle against copyright infringement. Issues like piracy, stealing game codes, and showcasing a large part of the game while streaming or reviewing without the creators' permission are all activities that come under the bracket of infringement. There is also a fine line when there is a question of what can be an infringement and what is not. This can be dealt with under the law of fair dealing as an exception to infringement. This Paper focuses on understanding the evolution of copyright protection in the gaming industry, illuminating the forms of work in video games that can be protected under the copyright law in India as well as foreign countries, which would also lead to jurisdictional issues that need to be addressed as well as the legal steps that a creator can take against an infringer or pirate. The study also aims to provide creators with suggestions to curb the chances of their content being infringed by others and improve the legal status of video games in India.

**History of copyright protection in Gaming:**

The first video game can be seen in 1958 when William Higinbotham created "Tennis for Two." some people say it started with the creation of “Spacewar!” created by students at MIT Boston. Defining the word video game was necessary to differentiate simple electronic games like pinball and other arcade games. A "video game" is an "electronic game" or a "computerized game" that would require a certain set of equipment in place to play was called a video game. As a source of entertainment that mostly targeted the younger male audience, it saw a surge of women buying video games in the early 2000s and people of all ages, not just the
young crowd. Soon, the industry was neck-to-neck with the movie and cinema industry regarding revenue. Although there was a lot of speculation in the minds of people who said that “computer or video games are too trivial and too frivolous to be considered as art, they are idle recreation at best” (Crawford, 2011, loc.24). The earliest speculation on whether video games should be given protection under the copyright law started with *Atari Games v. Oman,* A game called Breakout was developed for Atari by Steve Jobs and Steve Wozniak, the founders of Apple. It was a variant of the game "Pong." instead of a player playing against an opponent, and the player would use a paddle to rebound a ball against the walls and remove the additional bricks with a collision. The Copyright Office rejected this copyright claim as it was considered insufficiently creative to be protected under the copyright laws. Still, when Atari appealed the Registrar's decision, it was considered the different audio-visual representations and sequential forms of the bricks to be more complex than it seemed and that it was not given enough appreciation by the Registrar, and until 2006, the game was not protected due to certain biases from the Copyright office. It was a landmark judgment to determine the level of creativity involved in creating a video game.

The video games soon gained momentum and have seen a drastic change from Taito's Space Invaders to Rockstar North's GTA V. With the growing complexities in creating a game, there was a need to protect "assets," essentially the artwork, sound design, and writing. There was a long debate involved in categorizing a video game into the copyright law and considering whether it can constitute a form of speech to be included in the First Amendment. In *Brown v. EMA* Whether video games differ from other forms of artwork like books, movies, and music was considered and deemed too trivial and crude to be placed under the same law. But gradually, like in this case, the video games were considered protected speech and were extended protection under the First Amendment.  

Now, in the 21st Century, video games are a billion-dollar industry with big studios like Ubisoft, Rockstar, and Activision producing complex video games with brilliant storylines, music is carefully composed by the finest musicians to match the theme of the game, characterization and artwork which takes the effort of years of hard work encapsulated in one game. Therefore, the whole dynamic of protection is taken to a new level. The case of *NetEase v. Alibaba* group where Alibaba group had to pay the video game giant NetEase about 50 million Yen, which is about a massive 7.2 million U.S. Dollars over a mobile game called "Three Kingdom Tactics" for copyright infringement. An inference can be drawn that the significance of Gaming and copyright protection has grown massively throughout the years.

---

2. 131 S. Ct.2729 (2011)
4. 3:17-cv-05925-EMC (2017), United States District Court for the Northern District of California
I. Definitions:

1) **Video Game**: a game played with the help of audio-visual apparatus, an electronic system with computing capabilities, input devices like controllers or joysticks, mouse or keyboard, and output devices like screen, speakers, headphones, etc., and involves a certain level of complexity and automation.⁵

2) **Game assets**: any component that goes into a video game, for example, characters, objects, sound design, maps, artwork, writing of the code, environment, etc.

3) **Code**: Computer languages and sequences used for creating and defining functionality in software.

4) **Infringement**: Production or use of protected material under copyright laws without the copyright owner's permission and an official license.

5) **Fair Use**: Copyright laws establish four factors that must be considered in deciding whether a use constitutes a fair use. These factors are:
   - The purpose and character of the use, including whether such use is commercial or is for non-profit educational purposes;
   - The nature of the copyrighted work;
   - The amount and substantiality of the portion used to concern the copyrighted work as a whole and
   - The effect of the use upon the potential market for or value of the copyrighted work.

II. Game assets that can be protected under copyright laws:

“Video games are complex works of authorship containing multiple art forms, such as music, scripts, plots, video, paintings, and characters, that involve human interaction while being executed with a computer program on specific hardware.”⁶

- **Character designs**: The visual designs of a character in a game, including their appearance, clothing, and overall aesthetics, making them distinct and unique. E.g., Mario in Super Mario Brothers.

- **Environment**: All 3D and 2D artwork, including backgrounds, concept art including the early sketches and design documents, themes, and scenic art, can be protected under copyright laws

- **Sound design and music**: Music compositions, sound effects, background music, and voice acting are all protected under the sound recording and musical compositions copyright. E.g., The iconic music from "Tetris" is composed by Alexey Pajitnov and arranged by Hirokazu Tanaka.

- **Dialogue and Narrative**: The dialogues and script involved in the game can be protected under literary work under copyright laws. For example, the storytelling and narrative, including the dialogues of "The Witcher" series, is protected under copyright law as it forms the most crucial element of the game.

- **Game code**: The source code is a sequential programming written by creators and protected under copyright law.

---


⁶ Mr. Andy Ramos, Ms. Laura Lopez, Mr. Anxo Rodriguez, Mr. Tim Meng and Mr. Stan Abrams Supra Note 1
• **UI/UX Design (User interface and user experience)** - The user interface elements, icons, menus, and graphical elements are protected by copyright.

• **Game logos**: this would come under trademark and copyright law protection. E.g., the "Assassin's Creed," which features a unique emblem, is copyrighted and trademarked.

### III. Copyright infringement in India:

The development of video gaming culture in India was slow compared to other Asian countries, but once Ubisoft and other big studios started their investment in India, it picked up. The earliest Gaming was on computers and mobiles; cyber cafes were established, and their business boomed in the 2000s. PlayStation and Xbox started their business in India, producing games that would attract the Indian crowd with the help of Bollywood and mythology, which the audience would find appealing. PlayStation 2 created "Hanuman: Boy Warrior" based on the mythological god Hanuman, and games like Don 2 were developed by PlayStation, inspired by Bollywood movie starring Shah Rukh Khan. There was an increase in gamers who invested in consoles, P.C., as well as mobile games in India, which led to the development of the gaming industry in India; the South Korean video game developers Krafton helped in making the game Battlegrounds Mobile India which was quite similar to the Chinese game PUBG and therefore a necessity to protect copyright ownership from infringement arose.

In India, video games are protected under the Copyright Act 1957. Video games are recognized under multimedia applications as recognized by MEITY and since it consists of assets that are protected under their respective titles like literary work, artistic work, musical work, software code programming, musical work, and sound recording, as it is already dealt with in Chapter III, it should be protected under Section 2(f) which is cinematograph films. It is essential to understand that the copyright is usually owned by the developer and, in some cases, by the publisher. The copyright term would be 60 years from the date of publication.

**Role of judiciary:**

Since the gaming industry saw a gradual and slow development in India. Most of the judgements were passed with the help of precedents from cases decided in other forms of copyright infringement in the entertainment industry. As the gaming industry was considered to be a part of cinematograph films under Section 2(f) of the Indian Copyright Act, landmark judgements from that category were considered in deciding cases related to gaming. The judges stressed on intention of the infringer to decide whether the exception or defense under fair dealing (Section 52) could be operational in the cases of infringement. As a lot of the infringers used this section as an umbrella to shield themselves from the legitimate claims of the original owners.

To understand the role of the Judiciary in cases of infringement let us look into some of the landmark cases relating copyright infringement:

---

71 Ministry of Electronics and Information Technology (MEITY)
**Mattel v. Jayanth Agarwalla:**

**Facts:** The plaintiffs in this case were leading manufacturers of toys and games. They developed a board game called "Scrabble," which gained popularity as a household game for all ages. They were also maintaining websites like www.mattelscrabble.com and www.scrabble.com. The game's title was granted a trademark under section 11(6) of the Trademarks Act, 1999. In this case, the defendants launched an online version of the game called "Scrabulous," promoted through the online websites of www.scrabulous.com, www.scrabulous.org, and www.scrabulous.info. Therefore, infringing Trademark under section 29 of the Trademarks Act 1999. The Defendant used hyperlinks to the plaintiff's website to read the game's rules and misled the public into thinking Mattel owned that online game, too.

**The contention from the Defendant:**

The Defendants held that there was no intention of misappropriation; they denied all the claims of hyperlinks and metatags that would mislead the public and that the word scrabble was in the public domain and, therefore, an infringement cannot occur. Moreover, a three-dimensional article, like a board game, is not copyrightable under Section 15(2) of the Copyright Act.

**Issues:**

- Does the use of metatags and hyperlinks amount to trademark infringement?
- Whether the mere rules of the board game Scrabble and the layout are enough to claim copyright protection?

**Held:**

The Defendants were restrained from using the trademark "Scrabble" as the mark is distinctive and popular amongst the public. The court held that the arrangement of colors and tiles could be protected under the Designs Act of 2000. Still, a requirement of 'originality' must be included and cannot be covered under the Copyright Act of 1957.

**Sony Computer Entertainment Europe Ltd. V.s Harmeet Singh & Ors:**

**Facts:** Sony Computer Entertainment had rendered systems like the P.S. Vita and PlayStation 3 were modified, and pirated content was uploaded into the consoles and sold by Harpreet Singh and his colleagues from a shop in Delhi. This was done to run the pirated version of Sony's games with the help of modified pirated software. The defendants would decrypt the original encrypted code of the original machines to make it compatible with the pirated games. The original games were quite expensive; therefore, Harmeet Singh and others took this to their advantage and bought one original disc, which was duplicated and sold to consumers at a nominal price. The defendants' overriding encryption code violated the plaintiff's copyright

---

8 2008 (153) DLT 548, High Court Delhi

9 Kumar, Vivek (2014) “Mattel, Inc. and others v Jayant Agarwalla and others.”

10 2012 (51) PTC 419 (Del), High Court Delhi
in software. An injunction was pleaded before the court restraining the infringement caused by the defendants.

**Issues:** Whether there is a copyright infringement of software by the defendants?

**Held:** The court held that there was a clear case of infringement as the defendants altered the equipment of the plaintiffs as well as sold counterfeit and unlicensed copies of Sony's games, which is against the copyright law of 1957 and, therefore, an ex-parte decision was passed for Permanent Injunction against the defendants, prohibiting them from selling the games and modifying the plaintiff’s consoles.

**Fair Dealing under Section 52 of the Copyright Act 1957**

Gaming is protected under Section 52 of the Copyright Act, but the scope of protection is limited. Some companies need not pay attention to infringement that is not so significant and damaging to their reputation. Still, when gamers are posting content related to the game, it is always advised to tread with caution. Online Streaming is when players or gamers broadcast themselves playing a game with a live audience watching them play. Many gamers like “Ninja” and "Auronplay" have gained popularity streaming on platforms like YouTube and Twitch. Some gamers are even paid to stream and review a game, as that would help as a marketing strategy for the developers. However, the streamers who have yet to attain such permissions may be sued for infringement if they are not speaking a word or reviewing the game and silently playing it. There still needs to be a clear law that deals with Esports or competitive gameplay where players compete for a certain prize. This is not protected under the section 2(f) of the Copyright Act, 1957. There is scope for a lot of improvement in gaming protection, especially in India, as the industry has yet to gain prominence as it has in other foreign countries.

IV. **Gaming in other countries:**

There is a lack of jurisprudence in terms of the protection of video games in India, and this is because the industry is not taken seriously; the stigma surrounding the psychological effects of video games on young adults is one of the reasons video games are not given the significance they deserve in the field of creative work. There is an assumption that there are two groups in the world: some countries believe video games are far superior to computer programs as they require a specific skill and creativity to be made. The other group believes video games are audio-visual works that can be protected under the different sub-headings and spectrums. Some countries like Kenya and the Republic of Korea believe video games should have dual protection under audio-visual works and software programming. The code has to be protected as it is the source for creating a game.\(^{11}\) Article 2 of the Berne Convention also protects video games as they are complex

---

works comprising multiple copyrighted works. One of the landmark foreign judgments regarding copyright infringement of the source code is:

- **Nintendo v. Tengen**:

  **Facts:** Atari Inc. created the Atari VCS, the only popular console in the 1980s. Nintendo gained prominence in the North American Market with the console Famicom. There was an issue with many third-party developers’ games flooding the market and crashing or causing a recession in video game consoles. Nintendo protected their console with a lock-out system called 10NES (Nintendo Entertainment System), which would allow only authorized cartridges to be played in the game. Atari, under their subsidiary Tengen, wanted to replicate the same, tried to reverse engineer the 10NES chip, and stole the source code from the U.S. Copyright Office under pretenses. Nintendo decided to file for infringement of both patent and copyright against Atari.

  **Issues:** Whether there was infringement of copyright, or was it fair use according to the defense taken by Atari Inc.?

  **Held:** The court held that there was infringement by Atari Inc., as they stole the source code from the U.S. Copyright Office, and it does not come under Fair use as the motive was to replicate the code to protect their console and, therefore, for commercial purposes. Although Nintendo won the case, they faced backlash due to their monopolistic and unfair trade practices against the Sherman Act and had to pay damages to the Federal Trade Commission.

Copyright infringement can be avoided with the help of a few safeguards and precautionary steps that the creator of the game can take. The developers can ensure Digital Rights Management or DRM platforms like Steam to ensure valid licenses are associated with the user's account. It would only launch the game if such a license is found. This helps fight against piracy as the buyers cannot share the game online. Sometimes, these platforms can crash or shut down, which will cause many issues for the users. The DMCA, or Digital Millennium Copyright Act, lays down anti-copying safeguards and prohibits the use of Copyright Management Information under 17 U.S.C.§ 1201(a)(1)(A). If an owner finds a content host infringing upon these guidelines, the owner, through the DMCA, can send a "Takedown" notice to the host, forcing them to take down the content infringing upon the owner's right. Getting a license to protect oneself from these Takedown notices is always safe.

There is also the User Generated Content (UGC), which enables the users to modify the game to their liking by changing the appearance, adding new soundtracks, and adjusting the levels. This does involve creativity, but there is still uncertainty as to whether this content can be granted copyright, which enables big corporates to infringe upon such content which needs protection.

---

12 975 F.2d 832 (1992) United States Court of Appeals for the Federal Circuit
India needs stronger laws protecting and regulating the gaming industry. The issues with fantasy gaming have also risen in recent years, with Dream 11 and other online rummy games battling gambling laws. Esports are still not protected under copyright laws, although there has been a surge in gamers competing in Esports throughout the years. The inclusion of self-regulatory bodies, as well as modifications to include E-sports under section 2(f) of the Indian Copyright Act of 1957, will help leaps and bounds to improve the legal status of the gaming industry in India.

**Conclusion:**

There is a need for harmonization of gaming laws in the field of copyright worldwide. As multiple countries develop games through a familiar brand or household name, following similar laws with equal sanctions is important when copyright is infringed. The damages paid in the U.S. for a case of infringement are far off from those paid in India; there is a need to change this equation. The industry has revolutionized the entertainment industry, and now, with the steps towards metaverse and Virtual Reality, the world of video games will only get bigger and more complex. The significance of Copyright protection will also elevate to a new level, which would require the laws to be flexible to accommodate the growing technology and innovations to come.

**References:**

1. Copyright Law and Video Games: A Brief History of an Interactive Medium-
   [https://www.researchgate.net/publication/272301419_Copyright_Law_and_Video_Games_A_Brief_History_of_an_Interactive_Medium](https://www.researchgate.net/publication/272301419_Copyright_Law_and_Video_Games_A_Brief_History_of_an_Interactive_Medium)

2. Status of copyright protection for video games in India- Chadha and Chadha Intellectual Property law -

3. Copyright Protection of Digital Gaming in India: An analysis of Mattel v Jayanth Agarwalla case-

4. Video Game Streaming and Copyright Law-by Himanshu Sinha- Khurana and Khurana-
