



COPYRIGHT ISSUES IN ELECTRONIC GAMES: A COMPARATIVE STUDY

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Abstract:

Video/ Electronic games are a type of modern art and perhaps one of the most contemporary ones. During the Pandemic lockdown, mobile, video, and internet games like "Ludo King" and "Call of Duty " increased significantly. Video/ Electronic games are intricate works of fiction that require players involvement, and this is done with the help of a computer programme on a specific hardware. They incorporate a variety of artistic elements, such as music, screenplays, stories, videos, artwork, and characters. Electronic games are therefore not produced as a single work but rather as a combination of distinct components, each of which may be protected by copyright provided it meets a particular standard of novelty and ingenuity. Article 2 of the Berne Convention states the subject matter of works covered under the copyright, video/ electronic games also have the characteristic features to fall under the ambit of subject matter of copyright based on that provision. This article explores whether the Indian Copyright Act provides a proper classification for electronic games since these games incorporate a lot of artistic elements, each of which falls under the subject matter of copyright, i.e., Graphical characters in the game comes under artistic work, musical elements in the game falls under musical work, the computer programme used in the game can be stated as literary work and the electronic games on the whole has the characteristics of a cinematograph film. The article aims to examine the lack of specific classification with respect to Copyright in Electronic Games in India by making a comparative analysis with foreign countries.

Key Words: Electronic Games, Berne Convention, Indian Copyright Act, Artistic Work, Computer Programme, Cinematograph Film, Literary Work.



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1. INTRODUCTION:

Copyright is a right provided to the creator for his creative work. The exclusive right which is incorporeal in nature. It is an intellectual property in the sense that it was derived from an idea that first occurred to the creator before being transformed into an expression or form. It is significant to remember that only the manner in which such ideas have been presented is protected by the Indian copyright law and not the idea per se. It must be the author's own work, original to him. When the author's concept is expressed in an original way, the work passes the originality test and is eligible for copyright protection. The Berne Convention, 1886, and the Universal Copyrights Convention (UCC), as amended in 1999, 2002, and 2012, are both exactly replicated by the Copyright Act of 1957, and India is a party to both treaties. India is an active member of the World Intellectual Property Organization (WIPO) and the United Nations Educational, Scientific, and Cultural Organization (UNESCO), and it has signed the Geneva Convention for the Protection of Rights of Producers of Phonograms.ⁱ

Creative and Originawork are protected under Copyright. Since video/electronic games are not specifically incorporated in any of the Nation's Copyright Acts, the question of whether copyright applies to them arises. There are many inventive components in video games that are eligible for copyright protection.

Early video games like Spacewar, Asteroids, and Pong were little more than pixels illuminating a monochrome screen due to the limits of computer technology. They had extremely simple functionality and employed straightforward geometric designs. When it came to protection, it was exceedingly difficult to tell the difference between the core concept of a game—which is not protected by copyright—and the expression or depiction of that concept by applying the merger doctrine. Multiple creative components are now present in contemporary video games. So how are these works classified legally? Are they audio-visual works or computer programmes?

From practically nothing, the video gaming business has evolved into a successful entertainment industry parallel to that of a film or television industries. Video games being a complex work includes a variety of artistic elements, such as music, screenplays, stories, videos, artwork, and characters. As was already mentioned, video/electronic games have advanced along with the technological development. In the 1960s, video games only had simple forms for their images; shortly after, creators were able to include sounds. Since then, video games have been constantly evolving throughout the years, there are currently several components that might all be copyright protected. Video, music, literary components—such as the game screenplay and the computer program—are all included in video games, according to Lipson and Brain.ⁱⁱ Unquestionably, there are two basic components of modern video games: first the audio-visual elements, such as images, videos, and sounds; and second the computer software, which technically controls the audio-visual elements and enables player interaction with the various game features. Therefore, the problem is in determining if the work is a multimedia work, an audio-visual production, or simply a computer programme.ⁱⁱⁱ

The experience that players receive when playing a video game is made up of a number of different components. The software code that develops a game's user interface contains every component. Although software code is already covered by copyright, additional works made specifically for video/electronic games, such as graphical-character designs, plots, and scripts, may also be covered.

The various elements included in electronic games contain literary works in the form of computer programmes & gameplay script, artistic works in the form of graphics and graphical characters in the game, musical works in the form of musical components, games audio and cinematographic films in the form of moving images that the player may observe on the display or screen. the game's characters.^{iv} Due to the lack of a clear classification that must be examined, the fundamental question is whether video games may be classified as literary, artistic, or cinematographic works.

2. WORKS COVERED UNDER INDIAN COPYRIGHT ACT:

“Under the Indian Copyright Act, the following types of works have copyright protection: a) original literary, dramatic, musical, and works possessing artistic creativity; b) cinematograph films; and c) sound recordings.”^v

2.1 LITERARY WORK

A literary work is a work which is produced by human mind and is able to be expressed in writing or print. Such work should be the result of significant individual expression of idea, creative labour and skill.

A literary work that is original is one that was developed by human intellect and contains either word or quantitative assertions. “Computer software, databases, and compilations are considered as literary work.”^{vi}

“A computer programme is a collection of instructions that can be described in words, codes, schemes, or any other way that is machine readable and that can direct a computer to carry out a certain job or produce a specific outcome.”^{vii} Software for computers comprises computer programmes, computer data, and related printed materials like user manuals. Computer programmes must be “original”, that is, it must be the work of the author and not a mere copy of another person work and it should be “recorded” in writing or in any other form in order for copyright to exist in it.

2.2 DRAMATIC WORK

“Any item for recital, choreography, or play in which the staging or acting are fixed in writing or recorded in any other way is referred to as a “dramatic work,” but a cinematograph film is excluded under the purview of dramatic work”.^{viii}

2.3 MUSICAL WORK

“A musical work is any composition that just consists of music; it includes any graphic representation of the composition. Musical work does not include anything that is verbally spoken or sung.”^{ix}

2.4 ARTISTIC WORK

"Artistic work includes a painting, sculpture, engraving, or photograph, whether or not any such work has creative quality; a piece of architecture and any other work of artistic workmanship".^x

2.5 CINEMATOGRAPH FILM

“Any work of visual recording that has a sound recording accompanying it is referred to as a cinematograph film.”^{xi}

2.6 SOUND RECORDING

“Irrespective of the media on which the recording was made or the process used to create the sounds, a sound recording is a recording of sounds from which such sounds may be generated”.^{xii}

3. RESEARCH ISSUE:

Recent video games use highly effective media elements, such as clear visuals, audio recordings, and sound effects, together with sophisticated programmes, to deal with the audio-visual aspects of the game while also letting players engage with its different creative features. The methods and designs utilised to create the games as well as the game's content are covered by intellectual property rights. So, the main issue this research seeks to address is whether Video Games under the Indian Copyright Act, can be considered as a literary or artistic work or as a cinematographic film?

4. RESEARCH METHODOLOGY

Doctrinal research methodologies will be used in the proposed study. The research will be based on examination of case laws, books, articles, sources from the internet. Explanatory and descriptive research methods are employed in the study.

The proposed study would also compare several of these nations, including China, South Africa, Italy, India, and the United States for better understanding of the issue.

5. ELECTRONIC GAME

Electronic game is also called computer game or video game including mobile games, which is operated by computer circuitry. An electronic game is a game that is played electronically by manipulating the visuals displayed on a monitor by a computer programme. With the use of electronic buttons or a device console, the player controls the moving image in this game. The computer programme that controls the game and the audio-visual content that shows on screen are often the two key components of a videogame.

5.1 COPYRIGHT IN ELECTRONIC GAMES:

The video/electronic game provides an intricate combination of copyright elements: It can be copyrighted as computer programme; copyright will also subsist in the video games audiovisual elements. To determine which aspects of video games are protectable, courts have established a boundary between idea and expression in them and used the so-called "merger and scènes à faire" doctrines. The fundamental principle of copyright is that "although one's expression of an idea is protected under copyright and not the idea itself." Copyright is a right granted to or inferred from original creative works and it is not a right granted to unique ideas. Copyright exists only in the ideas which are made in permanent forms of expression. In contrast to the copyright regime that could be in the early phases of development, this discussion establishes the current state of the copyright doctrine as it relates to video games.^{xiii}

The court must make a distinction between components that are ideas and portions that are expression when determining the extent of copyright protection for a given work. Courts may find this to be a difficult assignment, particularly when dealing with new media like video games. In *Capcom U.S.A., Inc. v. Data East Corp*^{xiv}, the court determined that even though there were a lot of similarities in the defendant's martial arts fighting game with plaintiff's game, the doctrine of merger and scènes à faire was applied in the case and it was found that the similarities between both the games will not amount to infringement since the components which were similar are ineligible for copyright protection.^{xv}

5.2 Creative elements in an electronic game:

There are several intellectual components in electronic games that can be protected by copyright. The following creative components are all protected by copyright law:

I. Audio and Video elements:

The sound, music, or any other audio stream that lends the video game a sense of distinction and realism is referred to as the audio element. The audio component will be used in conjunction with the moving image to provide the player a realistic and enjoyable experience. The video game's audio effects are crucial to bringing the virtual people, narratives, and settings to life. The game's avatar voices, sound recordings, various streams of sound like gunshots, etc. are all included in the audio aspects.

In order to capture the players' interest, the video component needs to be inventive and special. The photographic images, moving pictures, animation, avatars, characters, background visuals, and text with instructions all fall under the category of video elements in games.

II. Computer Programme:

A set of instructions or rules created by a computer programmer to build a computer programme or computer software is known as a computer programme or programme code. Since the computer programme is in machine-readable format, a computer may run it. In a programming language, computer code will be written in source code format. The source code will be converted into

machine-readable code by the compiler or interpreter so that the computer may run it and complete the task. Computer code in a video game includes the main game engines, auxiliary code, computer software, and other codes necessary for the successful development and creation of video games. In accordance with the 1976 Act, a "computer programme" is "a series of statements or instructions to be utilised directly or indirectly in a computer in order to achieve a certain outcome."^{xvi}

6. INTERNATIONAL CONVENTION, ORGANIZATION AND TREATIES

There is a lack of clear legislative framework to protect video/electronic games in India. Due to a dearth of case law, copyright laws appear to be the only appropriate type of protection available, and the industry has adopted this approach as a business strategy. Article 2 of the Berne Convention for the Protection of Literary and Artistic Works, which lists the many categories of works protected under copyright, can serve as a good foundation for the copyright protection of video games. The sole consolation for video game creators and publishers in the absence of legal precedents is that the Ministry of Electronics and Information Technology ("MEITY") recognises the copyright protection of video games under the heading of "multimedia goods." It explains that multimedia is a collection of several components and describes it as "a computer based interactive communications process that involves a combination of word, sound, picture, still images, animation, video, or interaction content types." Therefore, various types of works may receive copyright protection. Video game animation and video components have been specifically identified by MEITY as being subject to the protection provided by the cinematograph film portion.^{xvii}

The continuing worldwide discussion to develop new guidelines for copyright protection in cyberspace is one in which WIPO is actively involved. In order to prohibit unlawful access to and exploitation of creative works on the Internet or other digital networks, the organisation oversees the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonogram Treaty (WPPT), collectively known as the "Internet Treaties." The two treaties' main goal is to update and add to the main existing WIPO treaties on copyright and associated rights. This is largely done in response to changes in technology and the market. More than 25 years ago, the Berne and Rome Conventions were enacted, and since then, new kinds of works, new markets, and new strategies for use and diffusion have emerged. Both the WCT and the WPPT, among other things, address the difficulties presented by contemporary digital technologies, particularly the distribution of protected content through digital networks like the Internet.^{xviii}

7. A COMPARATIVE STUDY

7.1 United States of America:

Original works of authorship that are permanently affixed to any medium or form of expression, currently known or subsequently developed, and from which they may be seen, reproduced, or widely transmitted, either directly or with the use of a device, are protected by copyright. The following components are included in works of authorship: literary works, musical works, artistic works, cinema, dance and choreographic works, etc.^{xix}

The quantity of legal issues regarding this specific piece of writing is indicative of the fact that the U.S.A has the largest video game industry in the whole globe. Video games, however, do not have a clear categorization under Copyright law, and the level of safeguard they receive will depend on the specific game and the elements that make it up. In this respect, video games are seen as works of authorship since they may be regarded as computer programmes; in this scenario, the source code for a video game is regarded as a literary work. A video game may be categorised as a visual arts work if graphical or graphic authorship predominates. The qualities of a particular video game must thus be examined in order to establish its legal categorization.

Since the 1980s, video games have been acknowledged as being subject to copyright. It was specifically addressed by the court in *Midway Manufacturing Co. v. Artic International, Inc.*, which dealt with the problem of determining exactly where video games fall inside the copyright range. The Challenge according to the court, was finding "whether the creative effort in playing a video game is enough like literature or artwork to constitute each performance of a video game the work of the player and not the game's creator" The court determined that the game's author was eligible to copyright protection for the events that took place in their work. In addition, the court found that the video game does not perfectly match the concept of a derivative work.^{xx}

Because "a computer programme can be the subject matter of a copyright as a literary piecework," US courts regard video games as computer programmes that are susceptible to copyrights^{xxi}. From the viewpoint of the players, the audio-visual gameplay is made possible by the game's coding. Consequently, the work is likewise copyrightable as an audio-visual work in *Atari, Inc. v. Amusement World, Inc.*^{xxii}

"*Atari, Inc. v. Amusement World, Inc.*^{xxiii}.", a 1981 court case involving video games, dealt with the similarities between the Atari-produced video games *Asteroids* and *Meteors* (created by the defendant). The court in this decision confirmed that video games can be protected by copyright as audio-visual works, upholding the premise that ideas are not protected by copyright but only the manifestation of an idea. Instead of filing the literary work in this instance, Atari registered the video game as an audio-visual work using a videotape in order to safeguard its intellectual property.

The concept/expression dichotomy, which holds that some kinds of expression are intimately linked to the idea of such a video game, ultimately led the court to decide in favour of the defendant. The court declared that "they were inescapable given the needs of the notion of a game featuring a spacecraft battling space rocks and given the technological constraints of the medium of a video game". As a result, the court reached the conclusion that the similarities did not amount to copyright infringement since they were just the plaintiff's ideas, which are not protected by copyright.

The Supreme Court in the case of *Brown v. Entertainment Merchants Association* determined that video games are eligible to copyright protection under the First Amendment, because they contain creative elements deserving such protection. According to the court, "like the protected books, plays, and films that came before them, video games communicate ideas—and even social

messages—through numerous familiar copyright elements (such as characters, gameplay, plot, and music) and through functionalities unique to the medium (such as the player's engagement with the virtual space)." However, the Court also noted in the same judgement that certain video game components are not protected by copyright "to the degree that they are essential to perform the specific genre of work."^{xxiv}

In the US, the legal categorization of video games is complex. The video game protection under copyright law is therefore still unclear and will rely on the aspects and peculiarities of each specific work.

7.2 CHINA:

Video games are not officially included in China's intellectual property laws, although copyright laws provide protection for software. According to Article 3 of the People's Republic of China's 2010 copyright law, a range of works, including literary works, computer software, photographic works, musical works, and drawings, are protected by copyright.^{xxv} So, even if there isn't a direct connection to video games, there might be pieces that incorporate all components that are present in the video/electronic games.

The majority of games today are similar to movies, so just as a movie can have multiple copyrights, games can also have them. Examples of these copyrights include those in the game's plot, choreography, graphic designs, cinematography, music, oral works, and, of course, the software used in its creation.

The definition of work under Chinese copyright law is broader than the definition found in Indian Copyright law.^{xxvi}

Computer/ electronic games are categorised as "computer software" or "software" as a result. Article 2 of the Regulations for the Protection of Computer Software (2013) defines computer software.^{xxvii} And Article 3(1) of the Regulations defines computer programme.^{xxviii}

In China under the Regulations for the Protection of Computer Software video games, just like all other computer software programs are granted protection. Thus, People's Republic of China Copyright Law covers video games under the ambit of computer software.

7.3 SOUTH-AFRICA:

Under the South African Copyright Act (herein called as SACA), the following types of works are covered by copyright protection: a) literary works; b) musical works; c) artistic works; d) cinematograph films; e) sound recordings; f) broadcasts; and g) programme-carrying signals.^{xxix}

The creation of the artwork, software, music, graphics, and animations used in video games takes a lot of time and effort. Each of these is recognised as a "work" in which copyright may be granted under the SACA.

In South Africa, ownership of copyright immediately vests in a proprietor according to the Copyright Act rather than being registered. It gives the owner complete exclusivity over the work, including the right to prevent its duplication or adaption.^{xxx}

Sec 1(viii) defines cinematograph film as “Cinematograph film includes the sounds included in a film's soundtrack but excludes computer programmes. Cinematograph film is any fixation or storage of data, signals, or a sequence of images on film or any other material that can be seen as a moving picture and reproduced when used with any other mechanical, electronic, or other device.”^{xxxix}

In the Art 2 of the SACA, works eligible for copyright, video games are not specifically included. Despite this, in the case of *Golden China TV Game Centre and Others v. Nintendo Co Ltd.*,^{xxxix} video games are regarded in South Africa as "cinematograph films," as determined before the Supreme Court of Appeals. The ruling is an appeal against the Transvaal Provincial Division of the Supreme Court of South Africa's decision which determined that video games still fall under the Copyright Act 98 of 1978's definition of "cinematograph films" even after the Act was amended to specifically include "computer programmes" as copyrighted works.^{xxxix}

Nevertheless, considering the complexity of video games, intellectual aspects can be protected by copyright, and this includes the computer code used to perform the work. These programmes are also covered by the SACA, and covers: i) a form of the programme in a programming language, software, or documentation that is different from that of the programme, or (ii) a fixation of the programme in or on a medium that is different from the instrument or channel of fixation of the programme.”^{xxxix}

7.4 **ITALY:**

The Italian Copyright Act of 1941, as amended in 2003, does not explicitly define multimedia works, but they are mentioned in Articles 171-ter f bis regarding criminal infringement and 181-bis, which mandate the application of a SIAE label^{xxxv} to both software and multimedia works to ensure their originality.

In an Italian court, video games were originally described as "gadgets designed to occupy the time of idle people" (Turin Magistrate Court, May 25, 1982). The designation of software at the time rendered it unprotected by copyright. The legislation against unfair competition forbade copying. A subsequent ruling by the Turin Court (Atari Judgment, October 17, 1983) focused on the motion images substance that distinguishes every video game and classified it as an audio-visual work, thereby broadening the copyright protection and its applicable regime regarding copyright violation and illegal copying.

When seizing unauthorised copies for sale, the legislation fluctuated between classifying them as software^{xxxvi} and as images in motion^{xxxvii}, even if the copies did not include the SIAE mark. In the famous *Dalvit* Judgment of May 25, 2007^{xxxviii}, the Italian Supreme Court ultimately identified video games as multimedia works after realising the legislative gap and that the definition of "images in motion" was insufficient to capture their intricacy. Subsequent case law^{xxxix} has supported its legal standing.^{xl}

7.5 **INDIA:**

The law with respect to gaming in India is not completely defined, hence the copyright classification is dependent on the particulars of each individual case and is derived from commercial practise. The Indian Copyright Act of 1957 also protects some of the works listed in Section 13 of the Act.^{xli}

Since there is no clear case law on the subject, it is uncertain if video games may be considered "cinematograph works" under the Indian Copyright Act. The definition of "cinematograph film" according to Section 2 of the Act is any work of visual recording on any medium produced through a process from which a moving image may be produced by any means and includes a sound recording accompanying such visual recording.^{xlii} The term "cinematograph" is also meant to include any work created using a method similar to cinematography, such as video films. Video games might theoretically fit inside this definition given that it refers to any technique similar to cinematography, although this perspective is still speculative in the absence of relevant precedents. Additionally, the law makes it clear that computer programmes are considered literary works, hence video game source codes may be protected as literary/software works. Video games also has graphical characters in it which will be considered under artistic works. Thus, the Indian Copyright Act does not have any regulatory categorization for video games.

In the case of Sony Computer Entertainment Europe Ltd. Vs Harmeet Singh and Ors [2013] (High Court of Delhi), one affiliate company of Sony Computer Entertainment produced gaming consoles such as the Playstation 3, Playstation Vita, etc. and created a variety of games for them. With the use of "Jailbreak" software, which decrypts games' encrypted code, one shopkeeper, Mr. Harmeet Singh, and his accomplices, marketed such consoles in New Delhi by hacking the system and altering original equipment, making it suitable for use with pirated software. This was accomplished by charging the customer a little fee, allowing him to play costly games for a very cheap price. Just one original copy of the game was purchased by Mr. Singh, who then sold it to others by altering the coding. The Court issued an ex-parte order prohibiting Mr. Singh from duplicating, selling, offering for sale, distributing, or changing the consoles' processing units.

Thus, as the video game business continues to innovate, new sets of copyright issues also start to surface. Despite the fact that several parts of the same game may come under different type of work that can be protected by copyrights, the court has not yet addressed the particular problems associated with video games.^{xliii}

8. CONCLUSION AND SUGGESTION:

Thus, in this research, an effort has been made to investigate the various strategies that numerous nations have used to protect video games under Intellectual Property Law. The research has observed that on the side of a legislative uncertainty, most of the jurisdictions choose to safeguard these creative works as software; this is the case since the underlying computer programme is essentially the only thing that all video games have in common. In light of the most recent technological advancements, it is crucial to emphasise that, when created with the same software, many video/ electronic games will have comparable source codes or "game engines." While examining the legality these games, this aspect must be taken into consideration.

Video games are intricate works of art made up of several copyrighted works (such as literary works, visuals, sound, characters, and software), all of which should be individually protected by the law. Although the majoritarian tendency assumes that software predominates in video games, we think that other components, such as the audio-visual and literary components made specifically for each video game, will also be important in identifying one video game from another. Actor and musical performances may also be among them.

In addition, there are some video/ electronic games, such as those made for mobile phones or other types of electronic gadgets, like the well-known Ludo King or brick shooter games, which are not known for their audio-visual components, and they need to seek copyright protection for their software because this is an industry that is constantly changing and developing. As a result, none of the components—software nor audio-visual—would definitely win out. Instead, a distributive strategy appears suitable inasmuch as a video game combines the two.^{xliv}

Even though the TRIPS Agreements and the WIPO Copyright Treaty include in their ambit software and audio-visual works, there is no advice with respect to the protection of video games in multilateral treaties at the international level. The global society may consider the chance to discuss and analyse the position of these video/ electronic games under Copyright law given the intricacy and economic importance of these games.

The Nations Copyright law is silent about Video Game/ electronic game. As we have already seen, video games and electronic games contain several inventive and creative aspects, all of which are subject to copyright protection. Some countries have conducted their own research on the categorization of video/electronic games under Copyright, but India as such is currently lacking with respect to the classification when it comes to copyright protection for these games. Due to the uncertainty, there arise a question of whether the elements of video games can be protected individually or collectively? What type of copyright protection applies to video games is the fundamental worry, and this is still an open subject.

Like cinematograph film, video games should have its own distinct regulatory framework for better protection and clarity. Since the video gaming business is a growing, sought out, and lucrative industry, it is considered that it requires its own recognition under Copyright law. And if a separate regime is established for video games, it becomes clear how to protect each of its components under a single heading to avoid lacunae.

ⁱAntara Kumari, Meaning and Subject Matter of Copyright, LawBhoomi.<https://lawbhoomi.com/meaning-and-subject-matter-of-copyright/> -Last visited on 9/9/2022

ⁱⁱAshley Saunders Lipson & Robert D. Brain, Computer and Video Game Law – Cases, Statutes, Forms, Problems & Materials, by, Carolina Academic Press, 2009, p. 54.

ⁱⁱⁱAndy Ramos et.al., The Legal Status of Video Games: Comparative Analysis in National Approaches, WIPO, 2013.

^{iv}WadhwaReetika&JoyMeril Mathew, India: Copyright in The Gaming Industry, 03 January 2020

<https://www.mondaq.com/india/copyright/879888/copyright-in-the-gaming-industry> -Last visited on 9/9/2022

^v Sec 13 of the Indian Copyright Act, 1957.

^{vi} “Sec 2(o) of Indian Copyright Act. Literary work includes computer programmes, tables and compilations including computer databases.”

^{vii} “Sec 2(ffc) of the Indian Copyright Act. Computer programme means a set of instructions expressed in words, codes, schemes or in any other form, including a machine readable medium, capable of causing a computer to perform a particular task or achieve a particular result.”

^{viii} “Sec 2(h) of Indian Copyright Act. Dramatic work includes any piece for recitation, choreographic work or entertainment in dumb show, the scenic arrangement or acting, form of which is fixed in writing or otherwise but does not include a cinematograph film.”

^{ix} “Sec 2 (p) of Indian Copyright Act. Musical work means a work consisting of music and includes any graphical notation of such work but does not include any words or any action intended to be sung, spoken or performed with the music.”

^x “Sec 2 (c) of Indian Copyright Act. Artistic work means, — (i) a painting, a sculpture, a drawing (including a diagram, map, chart or plan), an engraving or a photograph, whether or not any such work possesses artistic quality; (ii) [work of architecture]; and (iii) any other work of artistic craftsmanship.”

^{xi} “Sec 2(f) of Indian Copyright Act. Cinematograph film means any work of visual recording and includes a sound recording accompanying such visual recording and cinematograph shall be construed as including any work produced by any process analogous to cinematography including video films.”

^{xii} “Sec 2(xx) of Indian Copyright Act. Sound recording means a recording of sounds from which such sounds may be produced regardless of the medium on which such recording is made or the method by which the sounds are produced.”

^{xiii} Drew S. Dean, HITTING RESET: DEVISING A NEW VIDEO GAME COPYRIGHT REGIME, University of Pennsylvania Law Review, Vol. 164, No. 5 (April 2016), pp. 1239-1280 (42 pages)

^{xiv} 1994 WL 1751482 (N.D. Cal, 1994)

^{xv} <https://patentarcade.com/2005/08/case-capcom-v-data-east-nd-cal-1994-c.html> -Last visited on 10/09/2022

^{xvi} “§ 17 U.S.C. § 101 (1988). In 1980, the definition of computer program was added to section 101. Pub. L. No. 96-517, 94 Stat. 3015, 3028. The Intellectual Property and High Technology Technical Amendments Act of 2002 amended section 101 by moving the definition for computer program from the end of section 101 to be in alphabetical order, after compilation. Pub. L. No. 107-273, 116 Stat. 1758, 1909.”

^{xvii} Yash Raj, The lacuna in the Indian copyright law vis-a-vis video games, NLUJ Law Review, 2020

<http://www.nlujlawreview.in/the-lacuna-in-the-indian-copyright-law-vis-a-vis-video-games/> -Last visited on 7/9/2022

^{xviii} WIPO Internet Treaties, https://www.wipo.int/copyright/en/activities/internet_treaties.html -Last visited on 12/9/2022

^{xix} “§ 17 U.S. Code § 102 - Subject matter of copyright: (a) Copyright protection subsists, in accordance with this title, in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. Works of authorship include the following categories:

- i. literary works;
- ii. musical works, including any accompanying words;
- iii. dramatic works, including any accompanying music;
- iv. pantomimes and choreographic works;
- v. pictorial, graphic, and sculptural works;
- vi. (6) motion pictures and other audio-visual works;
- vii. sound recordings; and
- viii. architectural works.

(b) In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work”

^{xx} Kuehl, J. (2016). Video games and intellectual property: similarities, differences, and new approach to protection. *Cybaris: An Intellectual Property Law Review*, 7(2), 313-349.

^{xxi} *Williams Elecs., Inc. v. Artie Int'l, Inc.*, 685 F.2d 870, 875 (3d Cir. 1982)

^{xxii} Li, Z. (2019). The copyright protection of video games from reskinning in china a comparative study on uk, us and china approaches. *Tsinghua China Law Review*, 11(2), 293-340

^{xxiii} *Chen Fan Corporation (Dand M) v. 27*, 1981).

<https://www.acspublishing.com/>

^{xxiv}Vrinda Sehgal, Status of copyright protection for video games in India, Chadha & Chadha Intellectual Property Law Firm, 2021.

<https://www.lexology.com/library/detail.aspx?g=19946c7c-c158-4a9b-9486-abfe84c94f69#:~:text=International%20Cases&text=In%20the%20case%20of%20Brown.protection%20under%20the%20First%20Amendment>. -Last visited on 7/9/2022

^{xxv} “Chapter 1 Article 3 of Copyright law of People’s Republic of China cites:

For purposes of this law, the term works includes, among other things, works of literature, art, natural sciences, social sciences, engineering, and technology, which are created in any of the following forms:

- i. written works;
- ii. oral works;
- iii. musical, dramatic, quyi, choreographic and acrobatic works;
- iv. works of the fine arts and architecture;
- v. photographic works;
- vi. cinematographic works and works created by a process analogous to cinematography;
- vii. graphic works such as drawings of engineering designs and product designs, maps and sketches, and model works;
- viii. computer software; and
- ix. other works as provided for in laws and administrative regulations.”

^{xxvi}Upasna Rana, Khurana & Khurana, Advocates and IP Attorney,

<https://www.khuranaandkhurana.com/2022/06/27/ip-protection-and-gaming-industry-in-china/#:~:text=A%20gaming%20character%20cannot%20be,is%20usually%20sought%20by%20producers>. – Last visited on 5/09/2022

^{xxvii}Art 2 of the Regulations for the Protection of Computer Software (2013): Computer software referred to in these Regulations shall mean computer programs and their relevant documentation.

^{xxviii} “Art 3(1) of the Regulations for the Protection of Computer Software (2013): Computer program means a coded command sequence, or a symbolic command sequence or symbolic statement sequence which can be automatically converted to a coded command sequence, executable by a computer or any other device with information processing capability, to achieve a certain result. For a same computer program, the source program and the object program constitute the same work.”

^{xxix} Sec 2 of the South African Copyright Act

^{xxx}Thapelo Montong, South Africa: "God-Mode" Your IP | Exploring Intellectual Property Protection Options For The Gaming Industry, 2019

<https://www.mondaq.com/southafrica/patent/865340/god-mode-your-ip-exploring-intellectual-property-protection-options-for-the-gaming-industry> -Last visited on 06-09-2022

^{xxxi} “Sec 1(VIII) of the South African Copyright Act: cinematograph film means the first fixation by any means whatsoever on film or any other material of a sequence of images capable, when used in conjunction with any mechanical, electronic or other device, of being seen as a moving picture and of reproduction, and includes the sounds embodied in a sound-track associated with the film.”

^{xxxii}1997 (1) SA 405 (SCA).

^{xxxiii} Owen H. Dean, Case Comment on Golden China TV Game Centre v Nintendo Co Ltd, South Africa: video - video games constitute "cinematographic films, Entertainment Law Review.

<https://blogs.sun.ac.za/iplaw/files/2012/08/Case-Comment-South-Africa-Video-Video-games-constitute-cinematographic-films-Golden-china-TV-Game-Centre-v-Nintendo-Co.pdf> -Last visited on 06-07-2022

^{xxxiv} Supra 2

^{xxxv} Società Italiana degli Autori ed Editori, which is the Italian Authors and Publishers collection society.

^{xxxvi} Supreme Court, Crim. Div., July 4, 1997

^{xxxvii} Supreme Court Crim. Div., December 15, 2006.

^{xxxviii} This case was related to violation of digital rights management (DRMs) where the defendant was charged with making an infringing chipset.

^{xxxix} Supreme Court Judgments, January 14, 2009, and March 4, 2011.

^{xl} Supra 2

^{xli} “Sec 13 of the Indian Copyright Act, Works in which copyright subsists—

(1) Subject to the provisions of this section and the other provisions of this Act, copyright shall subsist throughout India in the following classes of works, that is to say-
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-
- a) original literary, dramatic, musical and artistic works;
 - b) cinematograph films; and
 - c) sound recording.”

^{xlii} Sec 2(f) of the Indian Copyright Act

^{xliii} Supra 8

^{xliv} Ramos, Andy and others, The Legal Status of Video Games: Comparative Analysis in National Approaches, WIPO. Pg. 90 (2013)