IP Negative Spaces in Today's Evolving Video Game Industry

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Summary

Video games emerged in the 1960s with the primary aim of providing entertainment. Since then, the video game industry has evolved into a thriving sector. This article explores how this success could relate to the complex exploitation and enforcement of Intellectual Property Rights (IPRs), or, rather, to the lack thereof. The analysis focuses on three pivotal characteristics of video games: cloning, modifications (also known as mods), and unauthorised copies.

IP negative space encompasses the phenomenon of a thriving industry with a low level of IP protection. In the case of video games, the industry seems to have different responses to enforcing IPRs, with various incentives beyond exclusivity playing an important role.

Firstly, a lot of video game components fall outside the subject matter of copyright protection. This is especially important when discussing cloning, namely new video games "copying" the rules and functionalities of another video game. In *Nova Productions v. Mazooma Games*, for instance, the UK Court decided that the mechanics and functionality of video games do not amount to copyright protection, as they represent ideas rather than their expression. This presence of non-IP-protected elements promotes industry expansion worldwide and the development of new video games, including the creation of distinct video game genres.

Regarding mods, which are alterations made by the gaming community to the original version of a specific video game, we expect to observe a nuanced industry response. Alterations found in Bethesda's *Fallout* and *The Elder Scrolls* that enhance the video game by fixing bugs and improving content, seem to be permitted by video game companies. These play a role in the financial success of gaming companies and promote the creation of new video games. Conversely, when the mods undermine fair play, gaming companies usually implement stringent internal policies and regulatory measures. For instance, Blizzard's complaint about IP infringement over Bossland's mods culminated in several legal battles.

In the context of unauthorised copies, commonly referred to as piracy, the video game industry seems to have been relying on a more traditional IP enforcement approach. Nintendo's strategy over this matter has resulted in hundreds of lawsuits to counter unauthorised distribution of their video games.

In this light, our research provides insights into how the video game industry practices shift from IP "positive spaces", namely the traditional enforcement of IPRs, to IP negative spaces, thriving in the absence of enforcement. This analysis reveals how these shifts align with

business strategies and economic benefits, proving to have characteristics that fall into the IP negative space domain and vice-versa.

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1. Introduction

In the 1960s and early 1970s, high computing costs discouraged digital game creators from seeking profits, focusing only on the enjoyment of the creative process. Examples like Space War, an early multiplayer shooter developed by MIT graduate students and MUD, an early online game originating from a student project at the University of Essex, illustrate this era of amateur game development. Despite these roots, the industry has evolved into a professional landscape, with major corporations dominating, by investing and profiting millions from new products.[1]

The study of video games and intellectual property (IP) law is not new in the legal literature. For instance, the World Intellectual Property Organization (WIPO) has published several papers and studies that encompass an overview of video games elements and their protection by IP law, also outlining the protection by trademark, patent, trade secrets and copyright. [2] For the purpose of this article, our analysis will be limited to copyright.

[1] Greg Lastowka, 'Minecraft as Web 2.0: Amateur Creativity & Digital Games' in Dan Hunter, Ramon Lobato, Megan Richardson, Julian Thomas (eds.) *Amateur Media: Social, cultural and legal perspectives* (Routledge 2012).

[2] Gaetano Dimita and others, *Copyright Infringement in The Video Game Industry* (WIPO/ACE/15/4 World Intellectual Property Organization 2022) <https://www.wipo.int/edocs/mdocs/enforcement/en/wipo_ace_15/wipo_ace_15_4.pdf> accessed 19 January 2024; Andy Ramos and others, 'The Legal Status of Video Games: Comparative Analysis in National Approaches' (World Intellectual Property Organization: Switzerland, 2013) <https://www.wipo.int/publications/en/details.jsp?id=4130> accessed 19 January 2024; Catherine Jewell, 'Video Games: 21st century art' (WIPO Magazine, August 2012) <https://www.wipo.int/wipo_magazine/en/2012/04/article_0003.html> accessed 19 January 2024; David Greenspan and others, 'Video Games and IP: A Global Perspective'(WIPO Magazine, April 2014) <https://www.wipo.int/wipo_magazine/en/2014/02/article_0002.html> accessed 19 January 2024; Andy Ramos Gil de la Haza, 'Video Games: Computer Programs or Creative Works?' (WIPO Magazine, August 2014) <https://www.wipo.int/wipo_magazine/en/2014/04/article_0006.html> accessed 19 January 2024; David Greenspan and

In *Nintendo Co Ltd and others v PC Box Srl*.[3] the Court of Justice of the European Union (CJEU) addressed the definition of video games from an IP perspective, recognizing the hybrid nature of video games as both a software-based and video-based product.[4] Under the dome of this hybrid rationale, the CJEU entitles video game developer companies as potential IP rightholders, since video games are "complex multimedia works expressing conceptually autonomous narrative and graphic creations, (...) [and] must be regarded as intellectual works protected by copyright".[5]

The essence of the video game industry thrives on creations that are intangible in nature – the characters, storylines, and gameplay mechanics crafted by developers. On one hand, their IP is considered the cornerstone of recognition and success.[6] On the other, these companies struggle with enforcing and safeguarding such contents, as the globally scaled video game industry faces "[t]he fragmented approach to copyright infringement and enforcement and high level of unpredictability (...) based on the inconsistent classification of video games as copyright subject matter".[7]

However, sometimes, this absence of enforcement makes the industry thrive, increasing profit, creativity, and users. This paradox becomes the focal point of our research into the areas where IP legal enforcement is applied or intentionally sidestepped.

To study this paradox, our paper analyses illegal copies, cloning, and modifications (mods), as case studies, each representing facets of the response of the industry to the challenge of enforcing IP within the EU IP legal framework. These particular cases shed light on the inherent difficulties in defining the boundaries of what can be considered an IP negative space and the delicate balance between protection and freedom that characterizes the creative and commercial landscape of the video game industry. The present paper aims to provide a straightforward analysis that contributes to the practical understanding of navigating the complexities of IP in the video game sector.

Gaetano Dimita, 'Mastering the Game: Business and Legal Issues for Video Game Developers' (World Intellectual property Organization, 2021) <https://doi.org/10.34667/TIND.45851> accessed 19 January 2024.

[3] Case C-355/12 *Nintendo Co Ltd and Others v PC Box Srl and 9Net Srl* [2014] ECJ. Also see Tito Rendas, "Lex Specialis(Sima): Videogames and Technological Protection Measures in EU Copyright Law" [2014] 39 European Intellectual Property Review. In this case, Nintendo alleged that the defendant disseminated devices that were specifically engineered to deactivate Technological Protection Measures (TPMs) integrated into Nintendo consoles, as well as their corresponding video game cartridges or DVDs. The primary consequence of these devices was the facilitation of unauthorized copies of videogames and the execution of "homebrew" video games on said consoles

[4] "[V]ideogames (...) constitute complex matter comprising not only a computer program but also graphic and sound elements, which, although encrypted in computer language, have a unique creative value which cannot be reduced to that encryption. In so far as the parts of a videogame, in this case, the graphic and sound elements, are part of its originality, they are protected, together with the entire work, by copyright in the context of the system established by Directive 2001/29." *Nintendo Co Ltd v PC Box Srl* (n 3) [§23]

[5] Eleonora Rosati, 'Nintendo Ruling Confirmed Lex Specialis Nature of Software Directive: Does This Have Implications for UsedSoft Exhaustion?' (The IPKat, 26 January 2014) <https://ipkitten.blogspot.com/2014/01/nintendo-ruling-confirmed-lex-specialis.html> Accessed 8 January 2024

[6] Greenspan and others, Video Games and IP: A Global Perspective (n 2)

[7] Dimita and others, Copyright Infringement in The Video Game Industry (n 2) [§189]

2. Why do we talk about Video Games and IP Negative Spaces?

In the realm of visual arts, the concept of negative space refers to the space surrounding a subject that forms an artistically relevant shape. In 2006, Christopher Jon Sprigman and Kal Raustiala introduced it into the realm of IP legal theory. They initially explored this idea by examining how the fashion industry was thriving amidst a low level of legal protection of designs in the United States (US), coupled with widespread replication.[8] The authors concluded that the optimal level of IP protection varies across industries, creating different scenarios.[9] One, for instance, would be when IP offers minimal safeguards, as exemplified by the limited protection for fashion designs in the US. Another one would be when creators, although eligible for traditional IP protection, choose not to pursue it or enforce their rights.

Going further into this second scenario of negative space, Elizabeth Rosenblatt suggests that exclusivity is just one element of the "incentive puzzle" for industries dealing with intellectual creations.[10] In some instances, creators prioritize factors such as recognition, first-mover advantages, or network effects to create economic value for their works. In these cases, the exclusivity offered by existing legal frameworks might be more of a burden than a benefit,[11] and copyright protection would only complement the overall picture rather than being the sole motivator in such cases.[12] Consequently, an IP negative space emerges, even when the creation is – theoretically – protected by IP rights (IPRs).

The phenomenon of IP negative space is different for each industry and closely relates to sector-specific practices when owning and enforcing IPRs. In this instance, Tim Dornis concludes that due to varying protection needed across different products and industries, a "custom-made copyright statute should be considered for each industry and marketplace, if not for each product".[13]

[8] Christopher Jon Sprigman and Kal Raustiala, "The Piracy Paradox: Innovation and Intellectual Property in Fashion Design" [2006] 92 Virginia Law Review 1687, 1691
[9] Ibid,[1764]
[10] Elizabeth L. Rosenblatt, "A Theory of IP's Negative Space" [2011] 34 Columbia Journal of Law and Arts 317, 321
[11] Ibid
[12] Tim W. Dornis, 'Non-conventional copyright: an economic perspective' in Enrico Bonadio and Nicola Lucchi (eds) *Non Conventional Copyright: Do New and Atypical Works Deserve Protection* (EE 2018), 466
[13] Ibid, 469

Extensive legal literature analyses IP negative spaces in industries such as fashion, creative cuisine,[14] magic,[15] stand-up comedy,[16] typefaces,[17] sports,[18] and open-source software.[19] However, the video game industry, despite having substantial IP protection for its elements and scarce case law, has not been a focal point in IP negative space discussions. Hence, it does seem to fit, *prima facie*, in the IP negative spaces family.

When examining the video game industry, a distinctive behaviour regarding their IPRs becomes self-evident. There is copyright protection for most of its original features in the EU, including songs, audiovisual elements, characters, and storytelling. Yet, the industry experiences diverse reactions when it comes to the enforcement of IPRs, since numerous incentives beyond the exclusivity regime come into play.

Lies van Roessel and Christian Katzenbach's empirical research sheds light on how video game developers perceive imitation and inspiration in their daily practices. Their findings indicate that a certain level of imitation is widely accepted in the industry, contributing to the flourishing of video game genres like first-person shooters, platform video games, and matching tile video games.[20]

With this in mind, it is essential to closely examine some common industry practices and their fitting into the concept of negative space. Particularly, it is important to assess how the industry benefits from rightholders explicitly choosing not to pursue copyright protection.

3. Video game industry practices: an IP negative space?

[14] For more, see J. Austin Broussard-Vanderbilt, "An Intellectual Property Food Fight: Why Copyright Law Should Embrace Culinary Innovation" [2020] 10 Journal of Entertainment & Technology Law 691; Christopher J. Buccafusco, "On the Legal Consequences of Sauces: Should Thomas Keller's Recipes Be Per Se Copyrightable?" [2007] 24 Cardozo Arts & Entertainment 1121; and Emmanuelle Fauchart, Eric von Hippel, "Norms-Based Intellectual Property Systems: The Case of French Chefs" [2008] 19 Organization Science 187

[15] For more, see Jacob Loshin, 'Secrets Revealed: How Magicians Protect Intellectual Property without Law' in Christine A. Corcos (ed) *Law And Magic: A Collection of Essays* (Carolina Academic Press 2010); and S.A.Beckman, "Breaking The Magician's Code: Revealing The Contrast Between The Protection Of Secrets By Copyright Law And Public Disclosure By Patent Law" [2014] 31 Thomas Jefferson Law Review 5

[16] For more, see Dotan Oliar and Christopher Sprigman, "There's No Free Laugh (Anymore): The Emergence of Intellectual Property Norms and the Transformation of Stand-Up Comedy" [2008] 94 Virginia Law Review 1787

[17] For more, Blake Fry, "Why Typefaces Proliferate Without Copyright Protection" [2010] 432 Telecomm. & High Tech. L.; and Jacqueline D. Lipton, "To (C) or Not to (C)? Copyright and Innovation in the Digital Typeface Industry" [2009] 43 UC Davis Law Review 143

[18] For more, F. F. Scott Kieff and others, "It's Your Turn, But It's My Move: Intellectual Property Protection for Sports Moves" [2012] 25 Santa Clara High Tech Law Journal 765; and Gerard N. Magliocca, "Patenting the Curve Ball: Business Methods and Industry Norms" [2009] 4 Brigham Young University Law Review 875

[19] For more see Jon Garon, "Wiki Authorship, Social Media, and the Curatorial Audience" [2010] 1 Harvard Journal of Sports and Entertainment Law 95; Margit Osterloh and Sandra Rota, "Open source software development—Just another case of collective invention?" [2007] 36 Elsevier Research Policy 157; and J.F Schrape "Open-Source Projects as Incubators of Innovation: From Niche Phenomenon to Integral Part of the Industry" [2019] 25 Convergence 409

[20] Lies van Roessel and Christian Katzenbach, "Navigating the grey area: Game production between inspiration and imitation" [2020] 26 Convergence 402

The nuanced landscape of the video game industry suggests a complex strategy regarding their IP portfolio. The industry might pick in which aspects to enforce their IPRs, especially when other incentives come into play, making them thrive. When looking into some video game industry practices such as cloning, mods and illegal copies, this complex approach is clear. Considering the WIPO study on Copyright Infringement in the Video Game Industry[21] as a starting point, we have selected these three industry practices in which some important copyrightable elements of video games are at the core of the discussion. From the absence of protection (e.g. cloning) to the full enforcement of copyright when it comes to illegal copies, we aim to analyse whether these practices may point to a negative space, due to a success coming from the lack of IP enforcement.

3.1. Cloning

Cloning is "the intentional copying of sets of game mechanics, with slight alterations to art and design in order to capitalize on a previous games' success."[22] Specifically, the term "clone" is employed to denote a video game featuring replicated gameplay, fictional elements, source code, or any combination thereof.[23] In other words, developers take advantage of the rules and systems that govern and guide the player's interactions with a successful video game and copy them in their own video game.[24]

When it comes to the enforcement of these rights, some rare case law can be found. In the United States (US), in *Tetris Holding v. Xio Interactive,*[25] a Court decided that copies of several elements of a video game can amount to a copyright infringement, as long as they are aesthetic choices or "creative choices made as part of the look and feel of the game",[26] and not part of the "idea of Tetris or its game play".[27] Consequently, to create a video game that looks nothing like Tetris, but comprises the same rules of blocks falling into place, would not count as an infringement.

In *Nova Productions v. Mazooma Games*[28] from 2007, a UK Court also ruled on a cloning case. The decision states that, from a software perspective, an infringement consists of copying the underlying code. Differently, with regards to the video game mechanics, the Court ruled that they could not be protected by copyright, given that video game mechanics are not expressions of ideas, but ideas themselves.[29]

[21] Dimita and others, Copyright Infringement in The Video Game Industry (n 2)
[22] Tom Phillips, '"Don't Clone My Indie Game, Bro": Informal Cultures of Videogame Regulation in the Independent Sector' (2015) 24 Cultural Trends 143, 146 <https://www.tandfonline.com/doi/full/10.1080/09548963.2015.1031480> Accessed 19 January 2024
[23] Roessel and Katzenbach (n 20) [408]
[24] Gaetano Dimita and others, Copyright Infringement in The Video Game Industry (n 2) [§68]
[25] Tetris Holding v. Xio Interactive 863 F Supp 2d 394 (DNJ 2012)
[26] Ibid [16]
[27] Ibid
[28] *Nova Productions v. Mazooma Games* [2006] EWHC 24 (Ch), [2007] EWCA Civ 219
[29] At one point, the UK Court stated that '[i]It is wholly unrealistic to suppose that the European Court of Justice would hold that copyright protection was to be given to ideas at such a high level of abstraction as those in this case'. Ibid [§ 53]

In the EU, copyright protection extends to objectively identifiable creations bounded expressive objects (works) that result from one's free and creative choices and bear one's personal mark.[30] As mentioned, copyright does not protect underlying ideas, concepts, or video game functionalities. Therefore, while certain aspects of a video game's design and presentation are subject to copyright protection in the EU, the protection does not extend to the fundamental ideas or principles that govern the video game's mechanics or gameplay. In other words, what would be considered as cloning by video game developers, might consists only of these aspects not protected by copyright law – namely the theoretical rules and functioning of the video game –, consequently not amounting to a copyright infringement.

This uncertainty about which exact video games features are protected by copyright law and which are not, combined with highly expensive and time-consuming lawsuits, made the industry deal with cloning in a heterodox way. When cloning is especially prejudicial to business activity, video game companies mostly use "notice and take down" mechanisms on video game selling online platforms,[31] as well as other methods such as the exposure of cloning in the video game community, especially when it comes to indie video games.[32] Other times, companies do not oppose cloning at all, as long as it is limited to the video game mechanics and ideas. Consequently, imitation is a well-accepted part of innovation in the video game industry.[33] This lack of enforcement has not only permitted the industry to flourish but has also encouraged the development of increasingly successful video games and the creation of entirely new video game genres.[34] Hence, there is IP negative space when it comes to cloning in the video game industry. Akin to fashion designs in the US, which do not qualify for copyright protection due to their character of 'useful arts', the absence of copyright protection for video game mechanics and functionality has facilitated creativity and the thriving of the gaming industry.

Lies van Roessel and Christian Katzenbach's empirical research corroborates this assessment and reveals a strong preference of the industry for common practices that involve experimenting with existing video game mechanics, graphical styles, interface elements, and existing programming solutions.[35] Video game developers express a reluctance towards stricter copyright protection, asserting that it may impede innovation and genre development within the gaming industry.[36] Consequently, both aspects – innovation and genre

[30] Justine Pila and Paul Torremans, *European Intellectual Property Law* (2nd edition, Oxford University Press 2019), 252
[31] Dimita and others, Copyright Infringement in The Video Game Industry (n 2) [§90]
[32] Tom Phillips (n 22) [150]
[33] Data set of 7 articles and 247 comments on the case of 'ridiculous fishing' vs. 'ninja fishing'. Christian Katzenbach, Sarah Herweg, and Lies van Roessel, "Copies, Clones, and Genre Building: Discourses on Imitation and Innovation in Digital Games" [2016] 10 International Journal of Communication 10 838
[34] Ibid [841]. See also: Colin Anderson, 'Duplication or innovation? How games become genres
Earthbound Games': Colin Anderson reflects on the rise of the FPS, the sandbox RPG and more' (Games Industry.Biz 28 February 2019) <https://www.gamesindustry.biz/duplication-or-innovation-how-games-become-genres> Accessed 9 January 2024
[35] The study encompasses 20 semi-structured interviews with German game practitioners, adopting the 'exclusive informants' approach of media production studies. Roessel and Katzenbach (n 20)
[36] Ibid, 416

development – come into play as incentives to have less IP enforcement when it comes to copying certain features and game mechanics of video games. This demonstrates a strong negative space in the video game industry concerning cloning, which resonates with previous findings in the fashion industry, challenging the conventional belief that legal protection is a fundamental driver of innovation.[37]

3.2. Modifications (mods)

Amy Thomas' empirical research on End User Licensing Agreements (EULAs) found out that from the thirty selected agreements, twenty-five do not allow any kind of modification on the video games, while three permit it under some conditions and only two allow it.[38] Modifications, commonly known as mods, are alterations to the original video game made by the video game community.[39]

However, EULAs are only tools when it comes to the enforcement of IPRs in mod scenario, since companies may have different rules depending on how they will benefit from it and how specific mods are evaluated *vis-à-vis* legal, economic and cultural forces.[40] In these cases, despite the potential for mods to alter copyright-protected aspects of video games, such as the storyline, characters, and source code, copyright infringement claims are not typically pursued.

When economically or culturally beneficial, the modding community has encountered acceptance, if not explicit approval, from video game developers whose IP and products undergo alterations. Certain mods have gained such widespread popularity that the developers behind them have been offered positions within the gaming industry[41] or became part of the official video game. For example, a player published on Bethesda's official website a mod that removed loading screens from Bethesda's video game *The Elder Scrolls V: Skyrim*, eliminating the need to wait through black screen interruptions when entering new scenarios, increasing the players' immersion in the video game world.[42]

The more a mod becomes famous, the more users will download it and, consequently, raise the sales and the life cycle of the video game, since to use the mod, players need to buy the underlying video game. This turns mods into a mutually beneficial scenario for video game

[37] Ibid

[38] Amy Thomas, 'Can You Play? An Analysis of Video Game User-Generated Content Policies' (2022) CREATe Working Paper Series 8 <https://zenodo.org/record/6564948> accessed 19 January 2024

[39] "Players who interact with a high frequency around a game, and may develop a particular set of norms and forms of interaction." In Simon Egenfeldt-Nielsen and others, *Understanding Video Games: The Essential Introduction* (4th edn, Routledge, Taylor & Francis Group 2020) 325

[40] Mark Kretzschmar and Mel Stanfill, 'Mods as Lightning Rods: A Typology of Video Game Mods, Intellectual Property, and Social Benefit/Harm' (2019) 28(4) Social & Legal Studies 530 <http://journals.sagepub.com/doi/10.1177/0964663918787221> accessed 19 January 2024. See also Bethesda's case regarding nude mods that are against ToS, but are still open downloadable in 524.

[41] Gaming Mods and Copyright (*Michigan Technology Law Review*) <https://mttlr.org/2012/11/gaming-mods-and-copyright/> Accessed 19 January 2024

[42] Kretzschmar Stanfill [524]

developers, as they do not spend time, energy, and resources on mods, but receive financial compensation over them.[43]

However, while some of these alterations involve bug solutions and content improvement, others might have serious consequences for the video game online environment as they "jeopardise fair play".[44] This is due to the fact that mods can get out of the developers control very easily and bring serious economic consequences as "[i]n a game with cheaters running rampant, the number of players decreases, undermining the video game company's turnover."[45] When this happens, video game companies seem to be more prone to enforce their rights, among which their IPRs, by claiming breaches of the EULA upon players that do mods. In addition, companies rely on harsh technological enforcement measures, such as banishment and account blocking, depending on the terms of the agreement. Blizzard, a big video game company, sued Bossland in three different jurisdictions: UK,[46] US,[47] and Germany.[48] In all the cases, Blizzard claimed IPRs infringement and breach of the EULA through the unauthorized mod of their video games to create and sell cheating online devices. The plaintiff was successful in all three jurisdictions.[49]

This response from companies already demonstrates that not every move of the gaming industry points to an IP negative space. As mentioned above, the industry's response is shaped by the mods' impact on the video game and potential violations of the video game's rules. In addressing these issues, company policies often come into play, emphasizing a regulatory approach within the gaming community rather than resorting to copyright protection through legal proceedings. This distinction underscores the industry's inclination to handle mods internally, considering their effects on gameplay and adherence to established rules, rather than opting for copyright claims in a court setting.

3.3. Unauthorised Copies

While cloning involves replicating the essential elements of a popular video game with the intention of capitalizing on its success, when it comes to illegal copies of video games, it engages the unauthorized reproduction, distribution, or use of a video game's original content. This can include making and selling copies of the video game without the developer's or publisher's permission.

Although unauthorized copies of a work constitute an IP infringement that concerns several multimedia markets, it does have a different pattern when it comes to the video game industry. In contrast to other multimedia where users may transition from illegal copies to

[43] Ibid [524-525]
[44] Thomas (n 38) [14]
[45] Dimita and others, Copyright Infringement in The Video Game Industry (n 2) [§143]
[46] *Blizzard Entertainment SAS v Bossland GmbH* [2019] EWHC 1665 (Ch)
[47] *Blizzard Entm't, Inc. v. Bossland GMBH*, CASE NO. 8:16-cv-01236-DOC-KES (C.D. Cal. Mar. 31, 2017)
[48] *LG Bad Kreuznach* [2017] 3 StR 430/16 = NStZ 2017, 274 (German Federal Court of Justice, Bundesgerichtshof).
[49] Leo Kelion, 'Overwatch "cheat-Maker" Told to Pay $8.6m to Blizzard' *BBC News* (4 April 2017) <https://www.bbc.com/news/technology-39490317> Accessed 19 January 2024

legal ones, a player who opts for an illegal copy of a video game tends to maintain this behaviour without a shift towards legal consumption over time.[50]

The video game industry claims that piracy is the IPR infringement that "constitute a threat to the future of the industry and represents countless lost sales every year, but it has been notably difficult to substantiate this claim with objective data."[51] The illegal download of copies of video games directly impacts the sales and, consequently profit, of video game industries, especially in the first days after the release of a new video game.[52]

If, on one hand, big developers such as Nintendo choose a more traditional path to enforce IPRs over illegal copies, on the other hand, they also rely on technology for a piracy blockade.[53] According to the Nintendo website, they have supported 600 actions in 16 countries for IPRs enforcement over video game illegal copies.[54] They also use Digital Rights Management (DRM) to hinder unauthorized copies of a certain software,[55] in this case, the video game.

Furthermore, as another strategy to fight illegal copies, developers and publishers offer exclusive additional Downloadable Content (DLCs) and updates to players that legitimately purchase the video games. The ability of the industry to fit within several business models gives flexibility to develop different approaches according to market demands, technological advancements, and evolving consumer preferences.

In this case, copyright protection plays a pivotal role in the ongoing battle against illegal copies of video games. In the EU, Art. 6 of the Information Society (InfoSoc) Directive explicitly prohibits the circumvention of DRM mechanisms.[56] This means that tampering with or bypassing technological measures designed to protect copyrighted works is legally forbidden, reinforcing the EU's commitment to upholding the rights of content creators.

In *Nintendo v. PC Box*,[57] the CJEU ruled that the sale of devices facilitating the unauthorized access to copyrighted content constituted an infringement. This underscored the importance of upholding the integrity of technological protection measures and affirmed the

[50] Joost Poort and others, "Global Online Piracy Study" [2018] 21 Amsterdam Law School Research Paper, 67 <https://www.ssrn.com/abstract=3224323> accessed 19 January 2024

[51] Dimita and others, Copyright Infringement in The Video Game Industry (n 2) [§53]. Also see Peter Holm, 'Piracy on the Simulated Seas: The Computer Games Industry's Non-Legal Approaches to Fighting Illegal Downloads of Games' (2014) 23 Information & Communications Technology Law 61, 62 <http://www.tandfonline.com/doi/abs/10.1080/13600834.2014.899770> accessed 19 January 2024

[52] Rahaf Harfoush 'The Sharks Versus the Pirates: Grey Markets in Gaming' (*L'Atelier BNP Baripas,* 25 November 2020) < https://atelier.net/insights/the-sharks-versus-the-pirates-grey-markets-in-gaming > Accessed 19 January 2024

[53] Adam Adler, 'Is Nintendo Actually Winning Its Endless War Against Piracy?' (*The escapist*, 22 August 2021)

[54] According to the Nintendo website, they have sued 600 actions in 16 countries for IPRs enforcement over video game illegal copies. In Nintendo Co., Ltd., 'Legal Information' (*Nintendo Co., Ltd)* <https://www.nintendo.com.au/legal/information> accessed 19 January 2024

[55] Holm (n 52) [62]

[56] Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167 (InfoSoc)

[57] *Nintendo Co Ltd and Others v PC Box Srl* (n 3)

commitment to safeguarding the rights of copyright holders in the evolving digital environment.

Consequently, in the realm of combating the distribution of illegal copies of video games, copyright protection is of utmost importance. Companies, while developing their unique strategies for enforcement that often steer clear of IP litigation, also heavily depend on the strength of copyright protection. This includes, for example, implementing measures to prevent and take down DRM bypasses, showcasing the pivotal role that copyright law plays in safeguarding the interests of gaming companies when it concerns illegal copies of their video games.[58]

To qualify as a negative space, the video game industry would need to flourish in the absence of IP enforcement, which is not the case when considering illegal copies of the video games.

4. Conclusion

The three situations above reflect some of the challenges that the video game industry faces not only when it comes to developing a video game, but also after its publication. Many other uses and practices put IPRs at risk and could be analysed from the negative space perspective when it comes to the enforcement of these rights such as emulators and ROMs, key selling, account transfer, e-sports, and user-generated content in general, just to mention a few.[59]

However, video game cloning, mods and illegal copies display three different responses from the video game industry when it comes to IPRs enforcement. In video game cloning, negative space seems to be the main course of action chosen by the industry. As explained above, the lack of a consolidated case law in several jurisdictions, due to different interpretations regarding video game mechanics and functionality, combined with a reluctance towards stricter copyright protection, led the industry to a different path than the traditional enforcement of IP law. In mods, it seems that the economic benefit that a mod brings is the key element that determines whether or not developers abstain from enforcing an IPR - not properly because of the right itself, but rather as a tool to prevent economic damages. Finally, when it comes to illegal copies, developers, especially big companies, seem to enforce their IPRs through judicial litigation.

This conceptual analysis of the video game sector demonstrated that video games are not the ideal negative space subject matter, as design fashion is. However, it would not be correct to assert that the industry lies only in the “positive space” either. Just like video games are a complex subject matter for IP, the same complexity appears when it comes to the negative

[58] Raileanu Petrut, ‘“Why you mad?” - User and media perception on game design anti-piracy measures’ (Bachelor’s thesis, Uppsala Universitet 2020)

[59] For further details and how the discussion can overcome the IP law scenario see Dimita and others, Copyright Infringement in The Video Game Industry and Greenspan and Dimita, Mastering the Game: Business and Legal Issues for Video Game Developers (n 2)

space: video games transit from “positive space” to negative space and *vice-versa* as it fits into their business strategy and economic benefits, demonstrating its character of a complex enforcement object.