THE ISSUE OF “DEEP CONTROL” IN PROFESSIONAL E-SPORTS – A CRITICAL ANALYSIS OF INTELLECTUAL PROPERTY STRUCTURES IN ELECTRONIC GAMING

by

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A thesis submitted in conformity with the requirements
for the degree of Master of Laws
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2015

Abstract

This thesis deals with the issue of what the author calls “deep control” through IP law in the area of electronic sports (e-sports). The term is chosen because publishers of electronic games are able not only to protect the market of their original product, the game, but can also control downstream markets. The production of e-sports competition broadcasts, intended for the consumption via viewing as opposed to the active playing of the game, is such a downstream market.

So far, the legal issues involved in e-sports production have only attracted limited interest from scholars and case law addressing these particular issues hardly exists. Therefore, the first part of this work sets out to describe the structures of IP rights in e-sports with special focus on copyright law. Next, it is shown how these rights confer deep control onto the publisher. The paper concludes with an economic analysis.
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1. Introduction

1.1. What is e-sports?

In the broadest sense, electronic sports or *e-sports* can be defined as any competitive interaction between two or more players by use of an electronic game.\(^1\) It is a subculture within electronic gaming as a social phenomenon and, although its status as a sport can be debated,\(^2\) can be best understood when compared to traditional athletic sports.\(^3\) The structures are surprisingly similar. Players are organized in teams (sometimes called “clans”) and regularly compete in tournaments and leagues. Spectators may watch the matches, underlain with commentary, either live at the venue or, more conveniently, at home via stream.\(^4\) These fans,\(^5\) together with sponsors and advertisers, provide the financial foundation of e-sports.\(^6\)

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1. A narrower definition could only include professional playing (see Micah-Shalom Kesselman, “The Rapid Growth of E-Sports and the Lagging Law,” *The Journal of High Technology Law*, November 4, 2014, [http://www.jhtl.org/blog/tag/esports/](http://www.jhtl.org/blog/tag/esports/); last visited on August 30, 2015). However, amateur (“casual”) players would rightly feel irritated from being excluded. Therefore, while the distinction between professional and casual players is certainly relevant, corresponding to traditional athletic sports, I prefer the used more encompassing definition. One could imagine an even broader definition which includes human players vs. artificial intelligence competition. However, this is not how the term is normally used (see T. L. Taylor, “Raising the Stakes – E-sports and the Professionalization of Computer Gaming,” MIT Press 2012 at 87).


5. Crowdfunding, reliance on the fans as a source of financial support, has been a rather recent but extremely successful development. In 2013 the publisher of the game Dota 2, Valve Corporation, sold so called “interactive compendiums” to the players in order to increase the price pool of its tournament *The International*. Therby, Valve was able to raise more than $1.2 million. In 2014 the price pool broke the $10 million mark ([http://en.wikipedia.org/wiki/The_International_(video_game_tournament](http://en.wikipedia.org/wiki/The_International_(video_game_tournament)), last visited on August 30, 2015).

The history of e-sports can be traced back as far as to November 1972 when Atari published its extremely simplistic tennis simulator *Pong*\(^7\) which enabled two players to compete against one another.\(^8\) Since then, electronic games have become extraordinarily more complex and refined, albeit their focus lay primarily on single player gaming. A decisive step towards e-sports as a mass phenomenon could be observed with the publication of Blizzard Entertainment’s game *Starcraft* which first became a huge success as an e-sports game in South Korea and then in the rest of the world.\(^9\) Since then, the e-sports scene has significantly grown throughout the globe. The growing popularity of e-sports has allowed players to focus exclusively on their play as professionals. Increasingly, a whole industry consisting, *inter alia*, of teams, coaches, leagues and tournaments has emerged around the players. In this social context, where fun has become serious business, colliding interests\(^10\) are especially visible and accordingly their reconciliation and efficient balancing by the law is of particular importance.

While any competitive activity between players can be considered as a part of e-sports,\(^11\) in this paper, I will primarily focus on e-sports as a commercial endeavour, being played by professional players in order to create an economic good in the form of live or recorded matches which can be consumed by viewers. Especially three games, which are all highly popular in the scene in the time when this paper is written, shall serve as a basis of illustration: Blizzard Entertainment’s *Starcraft II*, Riot Games’ *League of Legends* (“LoL”) and Valve’s *Defense of the Ancients 2* (“Dota 2”). I hope to accomplish two things: First, this work shall give both scholars

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\(^8\) *Ibid*. at 6.


\(^10\) These interests will be further described *infra* at pp. 4 et seq.

\(^11\) *Supra* note 1.
and practitioners a comprehensive overview over the structure of IP rights in a field which has so far received only little scholarly interest and widely lacks clarification from current case law. While the first part is therefore primarily descriptive, and critique is limited to internal analysis of the law, I subsequently engage in a broader normative critique of my findings with a particular focus on economic considerations, assessing the desirability of the law de lege lata and proposing possible changes. The concern that game publishers might be able to exert too much control over e-sports activities through IP law will be an especial focus of this paper. The paper is based on the law of the United States.

1.2. Economic and social significance

In 2011, the market for electronic games was US$56 billion big in revenues.\textsuperscript{12} Unfortunately, no aggregated numbers on revenues exclusively for e-sports are currently available. However, based on the information available, it seems all but certain that it has become big business.\textsuperscript{13} In 2015, the prize pool for The International, an annual global Dota 2 tournament, amounted to US$18,429,613\textsuperscript{14} and its finals were watched by several million viewers worldwide.\textsuperscript{15} In a similar tournament of the rival game LoL in 2014, the prize pool amounted to at least $US 2.13 million. The venue of the tournament, the Sangam stadium in Seoul, South Korea, hosted more than 40,000 fans for the final, and another 27 million fans watched the matches live at their

\textsuperscript{12} Brian Casillas, “Attack of the Clones: Copyright Protection For Game Developers,” Loyola of Los Angeles Law Entertainment Law Review 137 (January 2014) at 140.
\textsuperscript{14} http://www.dota2.com/international/overview/?l=english (last visited on August 30, 2015).
Players can make a more than decent living from their profession. The best have an annual six digits income or might even make more than US$1 million. These figures show that e-sports has become a significant social phenomenon in the gaming scene and might even be just about to become mainstream.

2. Participants, their interests and potential conflicts

One fascinating aspect about e-sports, both from a legal but also from a broader social sciences perspective, is its social and economic complexity. As outlined in the introduction supra, a considerable number of participants are involved in the creation of e-sports as an economic good. All of these contribute to the experience of the viewer in a creative, organizational or financial way, adding value to the final product. As a consequence, the parties all have corresponding economic and other interests which are not always compatible. And even to the extent that corresponding interests exist, there is always the underlying question of income distribution: How much of the pie can one get?

2.1. Game publishers

First of all, game publishers presumptively want to maximize profits which is traditionally achieved through the selling of copies of their games. As a result, they wish to increase both the number of potential customers as well as customers’ willingness to pay. In genres like strategy

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or shooter games, a major factor to purchase a game is the multiplayer experience.\(^\text{18}\) Although technical questions of game design are of great importance to address the players' wishes, a broader approach for success is desirable. The formation of an active (semi)professional scene is an important factor to increase the attractiveness of a game, especially over a longer period of time in order to prolong its product life cycle. As a result, publishers would generally welcome a game's inclusion in major tournaments or the use of played matches by commentators.\(^\text{19}\)

However, a publisher is also interested in obtaining returns beyond the income from sales of the game. In fact, popular games like *Dota 2* are free to play and the publisher makes money by selling virtual items to the players. This practise is then again linked to funding tournaments' prize pools.\(^\text{20}\) Such a marketing strategy is only possible where the exclusive rights to supplement the game's mechanics are held. The question is whether this unfairly excludes third parties or whether only such a marketing scheme enabled the creation of the game and the e-sports scene around it in the first place. Furthermore, publishers are concerned with the presentation of their games.\(^\text{21}\) Any alteration might be seen as deformation. As a result, the question of control over the use of games becomes an imperative legal question.

\(^\text{18}\) E.g., one major focus of Blizzard Entertainment in the development of the add-on Heart of the Swarm for its game Starcraft II was to make the game’s multiplayer mode more accessible for newcomers (Michael McWhertor, “Blizzard's plan to make StarCraft 2: Heart of the Swarm easier on newcomers,” January 2014, [http://wwwpolygon.com/2013/1/23/3902664/starcraft-2-heart-of-the-swarm-multiplayer](http://wwwpolygon.com/2013/1/23/3902664/starcraft-2-heart-of-the-swarm-multiplayer), last visited on August 30, 2015).

\(^\text{19}\) See *supra* note 9 (Comerford) at 625. E.g., Valve explicitly organized the first professional tournament for Dota 2 in order to promote the game; see Jim Reilly, “Valve Goes Big With Dota 2 Tournament,” August 1, 2011 ([http://wwwigncom/articles/20110801/valve-goes-big-with-dota-2-tournament](http://wwwigncom/articles/20110801/valve-goes-big-with-dota-2-tournament), last visited on August 30, 2015). Positive correlations between two user groups of a product such as the one between e-sports participants and consumers of electronic games, both using the game as a platform, are called network effects. These effects will be further analyzed as part of the economic analysis *infra* at 49 et seq.

\(^\text{20}\) See *supra* note 5.

\(^\text{21}\) See the Blizzard Entertainment’s Video Guidelines, expressly stating that “to maintain and protect the image of our games, Blizzard [...] requires that Productions maintain the "T" rating” ([http://usblizzardcom/en-us/company/legal/videopolicyhtml](http://usblizzardcom/en-us/company/legal/videopolicyhtml), last visited on August 30, 2015).
2.2. Players

Professional players are the ones who directly create e-sports matches as marketable products that can be supplied to consumers. In return, they can create income from prize money, salary paid by their respective teams and earnings from sponsoring. Moreover, players may market their matches directly over the internet where they can make money from advertisements, fan subscriptions and donations.\(^{22}\) In this context, control over the dissemination of these matches becomes relevant as it enables players to restrict access and thereby create artificial scarcity resulting in higher prices (besides such economic interests, they may also be concerned to prevent the publication of a new game strategy or simply to conceal an embarrassing loss or misbehaviour during the game).

2.3. Teams

Professional players are often organized in teams, consisting of the major players, their sparring partners and coaches. High level players are paid a regular salary in addition to a share of their potential prize money. Sponsors provide additional support for teams and their individual players.

2.4. Tournament organizers

Tournament organizers\(^{23}\) provide the infrastructure for major e-sports events. They lease the

\(^{22}\) *Supra* note 3.

locality, provide the necessary technical means, invite players and commentators and market the contest to the fans. As I pointed out supra, the interests of tournament organizers and game publishers traditionally seemed to be largely overlapping. However, tournament organizers need a certain freedom to do their job, e.g. choosing the rules of the tournament and its aesthetic setting, which can influence a game's publicity and popularity. Also, they might want to interfere with the game design itself, e.g. by creating new maps or implementing advertising into the game – acts where copyrights and trademarks could be affected.

On the other hand, publishers' possible desire to obtain a share of the risen profits and modern marketing techniques might create greater tensions. Whereas tournament organizers traditionally worked relatively independent from the publishers, more recently the latter's involvement has considerably grown. This may take place by co-operation between the two parties.\(^{24}\) On the other hand, game publishers increasingly seem to take on the role of tournament organizers themselves, thereby forcing out the old top dogs.\(^{25}\)

2.5. Other subsequent users

The e-sports market in not limited to the participants named supra. One major class of subsequent users are independent commentators who underlay recordings of the matches (so called replays\(^{26}\)) with their own commentary, either to entertain or to provide additional

\(^{24}\) E.g. Blizzard Entertainment strongly relies on the Turtle Entertainment GmbH, better known under its brand ESL (Electronic Star League), to organize national and international tournaments for its game Starcraft II (see http://www.eslgaming.com/category/starcraft-2, last visited on August 13, 2015). Riot Games, the publisher of League of Legends, similarly has several so called “Partner Leagues” (see http://na.lelESPN.com/, last visited on August 13, 2015).

\(^{25}\) This is an alternative that Valve Corporation has chosen for its tournament The International which is exclusively hosted by it (http://www.dota2.com/international/overview/?l=english, last visited August 13, 2015).

\(^{26}\) Replays are part of the game mechanics of a game. They allow a match to be rewatched but also to transfer the
information. These users create a secondary market for e-sports matches. In that regard, they are dependent on players and tournament organizers to provide them with replays. At least prima facie, this does not seem to be in the latter's interest as independent commentators present undesired competition and making use of the matches without any financial remuneration might be considered as exploitative. However, as creators of paratext, subsequent users play a significant and distinct role within the e-sports scene. Like journalists, they are major multipliers and can increase a game's popularity.

The distinction between commentators and players can be blurry. Commentators might stream or otherwise publish videos of them playing e-sports matches or the single player campaign of a game (often called “Let's Plays”). On the other hand, players who market their matches directly to consumers normally simultaneously commentate on their play. Other subsequent users can be fans who create their own works based on e-sports content (e.g. fan videos such as compilations of video and replay excerpts to underlay the outcome with music) as well as operators of e-sports news websites. Such use, however, shall not be analyzed in the following. Nevertheless, it is important to keep this additional layer of usage in mind when pondering the “right” scope of copyright protection.

match, stored on a file in the game folder, to others or publish it online (supra note 2 at 199). The recording of a match can thus be easily traded just like any other economic good.

Marketing channels are once again Twitch.tv and especially YouTube (supra note 2 at 199).

Paratext describes “repositories of gaming capital that lie adjacent to the primary text”, i.e. creating expression or providing strategies, advice or other information (Dan L. Burk, “Copyright and Paratext in Computer Gaming,” University of California Legal Studies Research Paper Series No. 2009-22 at 5). An especially salient example of paratext as a source of information are the (so far) 621 “Day[9] Dailies”, analytical and instructional videos on the games Starcraft and Starcraft 2 provided by former player Sean “Day[9]” Plot (Plot's most recent dailies can be found here: https://www.youtube.com/playlist?list=PLgmCLtUkEutLopavzoAzlBn441Kqlx_0D).

Again, the relation between e-sports participants, other subsequent users and casual players is characterized by network effects as higher use within either user group increases the value of the platform good “game” for all other users and creates incentives for them to become more active as well (see Ariel Katz, “Substitution and Schumpeterian Effects over the Life Cycle of Copyrighted Works,” Jurimetrics Vol. 49 No. 2 (2009) 113, 128 and supra note 19).

An example for this is fan fiction (Supra note 28 (Burk) at 4). A prominent example for a fan video (among many) is this “Epic Moments” Starcraft 2 compilation: https://www.youtube.com/watch?v=NIbg3767y8.

E.g. the website GosuGamers (http://www.gosugamers.net/) which has existed since 2002 and is visited by 110,000 people per day (http://wiki.teamliquid.net/starcraft2/GosuGamers).
2.6. Two examples for assertions of control

To illustrate what kind of conflicts over content control might arise within the e-sports scene, two prominent ones shall serve as examples: KeSPA vs Blizzard and Riot Games’ conflict with the players it has under contract to play LoL. In 2007, the Korea e-sports Association (“KeSPA”), a governmental agency in South Korea which, inter alia, provides funding to e-sports but also organizes its own tournaments, planned to sell the broadcasting rights for Blizzard Entertainment’s game Starcraft without the publisher’s permission. After long but unfruitful negotiations, Blizzard ultimately decided to grant the exclusive broadcasting rights to a competitor of KeSPA, GomTV, in 2010. The other example is Riot Games’ failed attempt to force all its professional players to contractually agree not to stream any other games than LoL online. This conflict illustrates the deep effects of copyright protection into contract and competition law and the use of copyright law to control behaviour that seems far beyond its traditional core purpose to preclude freeriding.

3. Legal analysis - The structures of intellectual property law in e-sports

The question of this paper is: Who controls e-sports? From a legal perspective, control, here understood as the capacity to determine the production and use of games for e-sports as an economic good, requires ownership, i.e. the assignment of exclusion rights which in turn allow the rightsholder to condition any permission to use. As games and e-sports are intellectual goods, copyright law is a usual suspect as a source of such rights and, indeed, analysis of this

32 Supra note 2 at 161.
field of law will extend over many pages of this paper. However, adjoining fields of law such as trademark or antitrust law are relevant as well. Furthermore, one should not lose sight of other, especially technical, measures that can be used to retain control over intellectual goods (although, as such measures can usually be circumvented, they, too, rely on legal protection). Due to the limited scope of this paper, however, I can only touch upon some of them and mostly focus on copyright protection.

3.1. Copyright Law

In order to ascertain copyright law's potential as a source of control, I engage in a three-step analysis. First, I describe the dogmatic structure and extent of electronic games' protection via copyright (3.1.1.). Next, the legal character of e-sports elements, the plays (3.1.2.) and their commentated broadcasts (3.1.3.), will be determined in order to make out which rights of a game's owner may be infringed. Without any potential infringements, the use of games for e-sports purposes would be free to everybody. As far as infringements might occur, however, such use would require permission from the owner. Since he is generally free to deny such permission or at least attach it to any condition desired, copyright law would put the rightsholder into an almost omnipotent position to regulate the e-sports scene for his game. However, limiting doctrines and defences may limit this power (3.1.4.). Furthermore, market forces can put de facto restraints onto the exercise of rights and must thus be considered as a factor within the assessment of legal structures.

3.1.1. Copyright protection of electronic games

Copyright protection of electronic games is two-dimensional, conferring protection for the
game's underlying code (3.1.1.1.) on the one hand and for the expressive elements which the
game is comprised of in its perceivable form on the other (3.1.1.2.). Particular issues in the
analysis of games’ copyrightability are the requirements for originality and fixation in the
context of the need for player participation to visualize and arrange game content (3.1.1.4.).

3.1.1.1. The underlying code

A computer game's underlying code is a set of statements or instructions to be used in a
computer in order to bring about the game and is therefore subsumed under the definition of a
computer program in 17 U.S.C. § 101. As such, the underlying code, both in the form of
source and as object code, is protected as a literal work under 17 U.S.C. § 102(a)(1). This is
irritating as program code contains technical instructions and does not seem to express
creativity. However, all arguments seem to be exchanged and the case law is well established
in this regard. Taking into account the clear wording of the definition of literary works in 17
copyrightability, current copyright law's legislative history and the established case law,

35 1 Melville B. Nimmer and David Nimmer, Nimmer on Copyright § 2.18(H)(3)[b] (Matthew Bender, Rev. Ed.).
36 The source code is a “computer language [...] in an English-like symbolic form” in which a computer program
is written by the programmer. The source code is then converted into the binary object code by an assembler-
compiler program as a tool to communicate directly with the hardware; Jan L. Nussbaum, “Apple Computer,
Inc. v. Franklin Computer Corporation Puts the Byte Back into Copyright Protection for Computer Programs,”
June 15, 2015).
37 Apple Computer, Inc. v. Franklin Computer Corp., 714 F.2d 1240, 1249 (3d Circuit 1983), stating the basic
principle that “a computer program is [...] a 'literary work'”; Williams Electronics, Inc. v. Artic Instr, Inc., F.2d
870, 875 (3d Cir. 1982); Deborah F. Buckman, 7 A.L.R. Fed. 2D 269 (2005) at p. 11; Whelan Associates, Inc. v.
Jaslow Dental Laboratory, Inc., 797 F. 2d 1222, 1233 et seq. (3rd Circuit 1986) with further references.
38 This is partly acknowledged by the courts as copyrightability of computer programs’ non-literal elements is
conditioned and especially restricted by the “abstraction-filtration-comparison,” excluding, inter alia, certain
functional elements such as the ones that are externally determined or dictated by efficiency
39 The House Report on the 1976 Copyright Act states: “The Term 'literary works' [...] includes computer data
bases, and computer programs to the extent that they incorporate authorship in the programmer's expression of
original ideas,” H.R.Rep.No. 94-1476, 94th Cong., 2d Sess. 54 (1976),
abstain from opening this Pandora's box again and instead take codes' copyrightability as a given.

3.1.1.2. The audiovisual elements of the game

The second level of protection generally applies to the audiovisual elements which a game is comprised of in its perceivable form in which it is meant to be played. Such elements include a game's shapes, sizes, colours, sequences, arrangements and sounds.41 The concrete scope of a copyright can be disputed in a particular case. Similarly, there might be a differing understanding as to when “substantial similarity” between audiovisual effects is given.42 However, these problems rather pertain to instances of potential infringement by copying whereas in e-sports, the use of original games leaves little scope to raise such demurs.43

The two described levels of copyright protection overlap partially but are not merely duplicating each other.44 For example, protection of the program code does not prevent third parties from manufacturing “knock-offs” of a game which precisely resemble the original but use different code to create this result.45 As will be seen infra, the protection of the audiovisual game

http://www.copyright.gov/history/law/clrev_94-1476.pdf (retrieved: June 15, 2015). Accordingly the CONTU Report, commonly regarded as a source of legislative intent by the courts (Vault Corp. v Quaid Software Ltd., 847 F.2d 255, 261 (5th Cir. 1988) 261), concluded that it was “clear that Congress perceived programs to be ‘literary works’ [...]” and there had thus been concurrence “in the positions that programs are copyrightable,” National Commission on New Technological Uses of Copyrighted Works, Final Report 16 (1978).
40 E.g. Timothy S. Vernor v. Autodesk, Inc., 621 F.3d 1102, 1106 (9th Circuit, 2010).
42 Nimmer, § 2.18[H][3][b]
43 This is not entirely true as it is very well imaginable that a competitor creates a narrow substitute of a popular e-sports game to circumvent potential restrictions from the original game's owner. In fact, LoL, the concept of which closely resembles Dota 2, could be seen as such a case. Nevertheless, no legal actions have been taken in this regard and as such a potential conflict seems beyond the core legal issues of e-sports, illegal copying shall not be discussed in this paper.
45 See Stern Electronics Inc v Kaufman, 669 F.2d 852, 855 (2d Circuit 1982). This finding is not entirely
elements also plays a significant role regarding e-sports where the presentation of the game in its audiovisual form to the public is the core purpose of the activity.

3.1.1.3. Protection for the game as a whole?

It has been said that electronic games as a whole are entitled to copyright protection. Some court decisions seem to confirm this finding. However, the statement is misleading. As a general rule, games as such, i.e. as a set of instructions, are systems in the sense of 17 U.S.C. § 102(b) and therefore not entitled to copyright protection. What merely seems to be meant is by “protection of the game as a whole,” is that the audiovisual elements of an electronic game must not merely be considered for copyright eligibility independently from each other but in totality, including their interaction in a play. This is relevant for the assessment of creativity and the registration process. It does not, however, release the judiciary and the administration from the need to carefully demarcate the scope of a copyright in a game, i.e. its limited encompassed subject matter. Especially, generally accepted principles such as the idea-expression dichotomy or the scènes à faire doctrine are of significant relevance in this regard.

uncontested. Nimmer § 2.18[H][3][b] note 77.3a.
46 Supra note 37 (Buckman) at 16.
49 This is expressly said in Atari v. Oman I where it is suggested “that the whole – the 'series of related images' – may be greater than the sum of its several or stationary parts.” (Atari Games Corp. v. Ralph Oman, 888 F.2d 878, para. 20 (District of Columbia Circuit 1989)). See also Atari v Oman II, stating that “the author's selection and arrangement, however, may 'entail [the] minimal degree of creativity' needed to bring the work within the protection of the copyright laws;” Atari Games Corp. v. Ralph Oman, 979 F.2d 242 at para. 16 (District of Columbia Circuit 1992).
50 Supra note 44 at 55 et seq.; see e.g. supra note 41 (Atari v. Philips) at 615 & 617.
3.1.1.4. Player participation as an obstacle to copyright protection?

To determine copyrightability of games as audiovisual works, in particular three legal challenges had to be resolved by the courts, all of them being founded in games' particular feature to vary in appearance dependent on players' inputs. Qualifying something as an audiovisual work requires a *series of related images*\(^5\) which could be read as a requirement for the images to appear unchanged independent from their concrete presentation.\(^5\) Furthermore, it had been contended that games' audiovisual displays lack *originality*\(^3\) and *fixation in a tangible medium*\(^4\) as required by 17 U.S.C. § 102(a). It was argued that the individual character of every play demands that each of these must be qualified as an independent work of its own. Accordingly, this work could not be found fixed in the memory of a game's copy.\(^5\)

Courts did not follow this argument. Referring to the 1976 Copyright Act's legislative history, supposedly demanding flexible judicial reaction to the emergence of new technologies, they dismissed a narrow interpretation of the definition of audiovisual works.\(^6\) Moreover, it was determined that games' embodiment in memory devices satisfies the statutory requirement for fixation at least as long as a “significant portion” of images and sounds remain constant.

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51 17 U.S.C. § 101 reads: “Audiovisual works” are works that consist of a *series of related images* which are intrinsically intended to be shown by the use of machines, or devices such as projectors, viewers, or electronic equipment, together with accompanying sounds, if any, regardless of the nature of the material objects, such as films or tapes, in which the works are embodied [emphasis added].

52 *Supra* note 47 (*Midway v. Artic*) at 1011.

53 Originality requires independent creation and at least a “modicum of creativity” (*supra* note 44 at 53).

54 According to 17 U.S.C. § 101 “a work is 'fixed' in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration. A work consisting of sounds, images, or both, that are being transmitted, is 'fixed' for purposes of this title if a fixation of the work is being made simultaneously with its transmission.”

55 *Supra* note 45 (*Stern Electronics Inc v Kaufman*) at 856; *supra* note 37 (*Williams Electronics. v. Artic*) at 873 et seq.

56 The Seventh Circuit quoted its own decision *WGN Continental Broadcasting Co. v. United Video, Inc.*, 693 F.2d 622 (7th Cir.1982), holding that “Congress probably wanted the courts to interpret the definitional provisions of the new act flexibly, so that it would cover new technologies as they appeared, rather than to interpret those provisions narrowly and so force Congress periodically to update the act,” *supra* note 47 (*Midway v. Artic*) at 1011.
throughout every play.\footnote{Supra note 45 (Stern Electronics Inc v Kaufman) at 855 et seq; supra note 37 (Williams Electronics. v. Artic) at 874.} Along that line, computer games were held to be original works of the publisher. Player participation has not been considered sufficiently profound to consider him the author of a game's individual play. Being limited to choices incorporated in the game, he is not deemed to “have control” over its appearing sequences.\footnote{Supra note 47 (Midway v. Artic) at 1012.} Instead, individual plays are ascribed to the publisher's creativity.\footnote{Of course, the publisher as such is not creative. However, under the work for hire doctrine (17 U.S.C. §§ 101, 201(b)), the publishing company is regularly deemed the author of the creative works of its employees (supra note 44 at 75).} The courts' logical argument seems to go as follows: A game's images and sounds are a product of the publisher's creativity and thus original works.\footnote{Supra note 45 (Stern Electronics Inc v Kaufman) at 856.} As individual plays vary only to a limited degree but are characterized by their repeated appearance,\footnote{Ibid. at 856; supra note 37 (Williams Electronics. v. Artic) at 874.} they must be considered to consist mainly of these images and sounds. Therefore the play is merely a presentation of original audiovisual work. The courts’ reasoning is a negative one. If individual plays are not works on their own, the game in the abstract must be an original work.

3.1.2. Player participation and the legal qualification of a play

3.1.2.1. Introduction

Two features are salient in games. First, their display varies dependent on players' actions. And second, the user’s intellectual experience arises through interaction between him and the game’s expressive elements. These characteristics distinguish games from any other medium of entertainment.\footnote{Supra note 48 (Boyden) at 476.} In the following, I explore whether the players' participation affects the legal
qualification of each play of the game. The issue is complex but highly relevant. First of all, it establishes the legal basis for the assessment of potential intellectual property rights of players and other parties in e-sports. And second, the analysis of potential copyright infringements by use of games in e-sports relies on this qualification. As the scope of intellectual property rights in turn defines the freedoms and exclusive powers of the e-sports participants, all answers must be critically assessed based on copyright law's primary purpose to create an efficient system of liberty and protection which properly balances social access to intellectual goods and the incentivization of innovation.

3.1.2.2. Plays as derivative works?

Whenever someone plays a computer game, the concrete result, a series of images perceivable on screen, usually accompanied by corresponding sounds, could be a derivative work. According to the definition in 17 U.S.C. § 101, derivative works require recasting, transformation or adaption of one or more pre-existing works. Furthermore, all of these acts must include “a contribution of original material to a pre-existing work.”63 As could be read supra, however, courts have not been willing to acknowledge the existence of originality in the act of playing. All of the court decisions consider the player's input to be of little significance to the audiovisual product that constitutes a play. This is especially profound in Midway.64 Here, the court equates a player's performance with “changing channels on a television” in order to demonstrate his lack of control over the creation of sequences.

63 Nimmer § 3.03[A].
64 See supra note 47.
3.1.2.3. **Plays as performances - The traditional argument and its application to e-sports**

Matches that are played within the context of e-sports could qualify as public performances in the sense of the definition in 17 U.S.C. §101. This question is not only of academic interest. Admittedly, both public display and public performance can constitute an infringement of copyright in an audiovisual work according to 17 U.S.C. §501(a) in conjunction with §106(5) or §106(4), respectively. However, the former is subject to the exemption of 17 U.S.C. §109(c), allowing public display of a work's copy to viewers present at the place where the copy is located without the consent of the rightsholder. If this provision were applicable, e-sports matches could be freely shown to locally present spectators (albeit not broadcasted).

Both the terms “display” and “performance” are defined by 17 U.S.C. §101. In the case of an audiovisual work, the latter requires that “its images [are shown] in any sequence or to make the sounds accompanying it audible” whereas the former is limited to the presentation of individual, non-sequential images. As plays of electronic games consist of sequences of images and their sounds are usually made able to be heard as well, e-sports matches are performances of the protected audiovisual elements of the game, not mere displays. The only available court decision on this issue, *Red Baron v Taito*, supports this finding. In this case, the Fourth Circuit decided that plays of arcade video games on coin-operated machines constitute performances. Referring to House Report on the 1976 Copyright Act, it held that variation in the play due to player input cannot change this finding as “no particular order [of the images] need be maintained.”

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65 See *supra* note 47.
66 Ibid. at 279.
A performance takes place publicly if it takes place “at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered” or if it is communicated to such a place or to the public by means of a device or process (17 U.S.C. § 101). As far as matches can be observed directly on the venue where they are played and attendance is not strictly limited to members of the family or invited guests, the first alternative of the definition is satisfied.\(^{67}\) The requirement to purchase a ticket beforehand does not affect this result if, as usual, these tickets can be purchased by anyone.\(^{68}\) The broadcast of tournaments or single matches via stream or TV to anyone who possesses the necessary receiver satisfies the second alternative.\(^{69}\) As the definition expressly declares the time of reception to be without relevance, not only live but also subsequent broadcasting, e.g. via video on demand platforms such as YouTube, as well as any other act that makes matches available for later consumption, like uploading a replay file onto a designated website, qualify as public performances.\(^{70}\)

3.1.2.4. Critique of the finding in the broader legal context

As could be seen, courts have found no originality in playing an electronic game and there is at least some evidence that such plays would be considered performances of the game instead. However, one may very well question this finding. It should be noted that the first decisions have been made in the early 80s when video games had just emerged as a new source of entertainment. Accordingly, players’ options to interact with the virtual surrounding and thereby

\(^{67}\) See Nimmer § 8.14[C][1] and supra note 48 (Boyden) at 217. See also supra note 47 (Red Baron) where the plays were deemed to be public because they could be observed by anyone who visited the arcade.

\(^{68}\) Ibid.

\(^{69}\) See Nimmer § 8.14[C][2].

to influence shown sequences were highly limited.\footnote{E.g., in the original arcade game *Pac-Man*, the player's choices are limited to move his character either left, right, up or down.} Especially the almost pejorative description of players' input in *Midway* hardly seems adequate.\footnote{See supra note 44 at 61, describing the court's reasoning as "simplistic."} After all, mastering electronic games can demand great skill of a player,\footnote{See supra note 23 at 12, pointing out the great effort as to planning, preparation and execution and the "deep understanding" that are required to master a game like Starcraft.} a feature that is inherently prevalent in popular e-sports games which found their appeal to be regularly watched by large crowds of spectators especially on the fact that the matches exhibit such skill. However, how much has really changed since then? To master a game like *Pac-Man* requires a significant amount of skill and practice just like modern e-sports games do. Certainly, watching a match in modern e-sports is more appealing than watching hours of Pac-Man but one could argue that this growth in attraction must rather be ascribed to the significantly refined graphics and game designs than to the players input. Furthermore, the need for skill is by itself not a criterion for copyright eligibility.\footnote{Nimmer § 2.09[F]} Instead, it must be argued that players make a creative contribution great enough to justify the copyright protection.\footnote{Supra note 47 (*Midway*) at 1011.} Nevertheless, it is can hardly be considered good advice to simply follow case law which has its roots in a time when electronic games had just emerged on the scene to regulate a modern phenomenon such as e-sports. In order to gain further insights, the following part therefore enquires into the legal situation in other but related factual settings: the competitive play of board games (3.1.2.4.1.), the legal qualification of athletic actions in physical sports (3.1.2.4.2.) and the character of improvisations in the performing arts (3.1.2.4.3.). Should these fields of law exhibit inconsistency with respect to the finding for e-sports, this would presumptively be an argument for change.\footnote{Recognizing the necessary amount of creativity in the playing of electronic games would entitle such plays to copyright protection as long as the other requirements of 17 U.S.C. § 102(a) were satisfied. This would not automatically release the players from the need to obtain permission from the game's owner, i.e. the publisher, as plays would probably be considered derivative works (see 17 U.S.C. § 106(2)). However, assuming such consent, players would at least be granted an exclusion right which enabled them to exert valuable control over...}
3.1.2.4.1. Board games

In *Allen v. Academic Games League of America, Inc.*, the Ninth Circuit held that playing a board game in the context of a tournament does not constitute a performance within the meaning of the Copyright Act.\(^{77}\) In this case, the appellees had organized national tournaments for the games developed by the appellant.\(^{78}\) Unfortunately, the doctrinal underpinnings of the court's reasoning remain rather nebulous. It is founded on a narrow construal of the term “play” in the definition of a performance in 17 U.S.C. § 101 which is conceived as “generally” referring to music or records only. Although it notes the broader interpretation in *Red Baron*, it makes no effort to distinguish the facts in that decision from the ones that laid before it, seemingly taking it for granted that it could not apply as precedent. The court's following argument is consequentialist. Games were “meant to be played.” Conferring control onto the game developer in that respect via copyright law would create “undue restraints on consumers.”\(^{79}\)

Boyden on the other hand states that playing a non-electronic game is not a performance of it within the meaning of the Copyright Act.\(^{80}\) His explanation primarily refers to the way games are experienced. Instead of music and dramatic plays, they are not experienced directly via transmission but only constitute the conditions for the interaction between player and themselves as the means of experience.\(^{81}\) Closely related with that is his second argument: Communication of the work does not take place via the player to an audience but is inherent in the play itself with the player as the recipient.\(^{82}\) However, Boyden's argument that play moves in

\(^{77}\) 89 F.3d 614 (9th Circuit 1996).
\(^{78}\) Ibid.
\(^{79}\) Ibid.
\(^{80}\) Supra note 48 (Boyden) at 472.
\(^{81}\) Ibid. at 476.
\(^{82}\) Ibid. at 477 et seq.
games are “not typically designed to communicate with an audience,”\textsuperscript{83} while it cannot be
dismissed per se,\textsuperscript{84} finds its limits in the world of e-sports where just that is the major purpose of
the action. It is therefore hardly possible to apply it in this context.

\textbf{3.1.2.4.2. Athletic sports games}

It is commonly accepted that a sports game as such (meaning as an abstract set of rules) is not,
the broadcast of it, however, is copyrightable.\textsuperscript{85} Nevertheless, copyrightable subject matter could be seen in the performance of the individual play as a work either of the players (or other
participating parties such as the coaches). Case law on this subject matter is scarce. As far as can be seen, only two circuit court decisions have dealt with the question. In \textit{Baltimore Orioles, Inc. v. Major League Baseball Players Association} the Seventh Circuit stated that baseball players’ performances “possess the modest creativity required for copyrightability.”\textsuperscript{86} However, this opinion has been strongly criticized\textsuperscript{87} and, subsequently, has not caught on. Indeed, the reasoning of the court, merely referring to the “great commercial value” of the performance as an \textit{indicator} for creativity,\textsuperscript{88} seems insufficient.\textsuperscript{89} Furthermore, the court itself does not seem to have been certain of its conclusion as it is only mentioned in a footnote.\textsuperscript{90} As the decision's outcome does not depend on the performances' entitlement to copyright as such but rather relies on the copyrightability of the their recordings as motion pictures,\textsuperscript{91} the footnote contains only an obiter dictum and, thus, it is not binding precedent for subsequent decisions.

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\textsuperscript{83} \textit{Ibid.} at 478.
\textsuperscript{84} The argument is completely rejected by Burk \textit{supra} note 6 at 1565, stating that there is no requirement of communication for copyrightability in the first place.
\textsuperscript{85} \textit{National Basketball Ass'n v. Motorola, Inc.}, 105 F. 3d 841, 847 (2nd Circuit 1997); 1 Nimmer, § 2.09[F].
\textsuperscript{86} \textit{Baltimore Orioles, Inc. v. Major League Baseball Players Association}, 805 F.2d 663, 668 (7th Cir. 1986).
\textsuperscript{87} Nimmer § 2.09[F], describing the decision as “erroneous.”
\textsuperscript{88} \textit{Supra} note 86 at 669 note 7.
\textsuperscript{89} See \textit{supra} note 87.
\textsuperscript{90} See \textit{supra} note 88.
\textsuperscript{91} \textit{Supra} note 86 at 668 et seq.
Consequently, in *National Basketball Ass'n v. Motorola, Inc.*, the Second Circuit did not follow *Baltimore*, deciding that the athletic actions of professional basketball players are not copyrightable subject matter. Its reasoning includes both internal analysis arguments as well as political considerations: Sports events did not have any authors as required by 17 U.S.C. § 102(a) due to their lack of scripted performance and the following unpredictability of their development.

Moreover, the necessity for openness of the game as to players options to choose from a variety of tactical moves was stressed. Conferring a copyright onto all who contribute to the individual game is deemed to create an unbearable level of complexity. *NBA* has in turn met criticism in the legal literature. Burk points out that scripting is neither a prerequisite for nor is a lack of previous determination an obstacle to copyright protection. Nevertheless, current common opinion seems to concur with the Second Circuit to deny athletic performances copyrightability.

### 3.1.2.4.3. Improvisations in the performing arts

One may indeed wonder why e-sports could be compared to the performing arts. However, in cases where improvisation takes place, the similarities are stunning. In theatre, there is the creator of the stage design on the one hand and the performer, spontaneously deciding his actions within this setting on the other. Computer games can be describes in quite the same way. There is a certain setting which is determined by one party, the publisher, and within these

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92 See *supra* note 85.
93 *Ibid.* at 846. Despite the clear wording in *Baltimore*, the Second Circuit denies that the Seventh Circuit ever referred to the copyrightability of players’ performances as such. While this is correct as to *Baltimore’s* stare decisis, the decision clearly states otherwise at 669 note 7.
95 *Supra* note 6 at 1568.
96 *Supra* note 87.
design choices the player is free to decide which moves to make. Although there is no protection for performers in the United States per se, improvised performances are likely entitled to copyright protection if they are sufficiently creative and recorded.\textsuperscript{97} Taking the performing arts as a reference would thus support copyrightability of gameplay.\textsuperscript{98} So far, however, this has not been considered by the judiciary.

3.1.2.4.4. Conclusion

Unfortunately, case law from related areas does not present a coherent picture which could be applied to e-sports analysis. While competitive play of board games might be copyrightable subject matter like improvisation in the performing arts, the same notion is widely rejected for athletic actions. Moreover, arguments on both sides are not fully convincing. Allen seems weak against Burk’s reasoning at least within the context of board games. Similarly, the argument of “openness” in NBA is not completely compelling as it is far from clear if granting copyright eligibility would necessarily entail that particular plays could not be mimicked by others any more.\textsuperscript{99} Whether any court might accept the parallels to improvisations, is all but uncertain. In conclusion, case law exhibits little consistency and is hardly of assistance for finding a clear taxonomy in e-sports. Thus, one needs to presume that the finding so far, playing as a performance, is still applicable.

\textsuperscript{98} Supra note 6 at 1567.
\textsuperscript{99} See supra note 6 at 1567.
3.1.2.5. Protection of the players' input conferred by other sources of law?

It should at least be briefly considered if at least limited protection could be found in other areas of law. Burk has pointed out that the Beijing Treaty on Audiovisual Performances, which has been signed by the U.S., contains certain performance rights. However, this treaty has not entered into force yet, because the necessary quorum of ratification has not been reached so far. Therefore, at least presently, it cannot grant any additional rights. Another potential source of protection could be the right of publicity. However, it seems unlikely that this right can be applied to players’ performances. Curiously, they do not seem to have any rights to their input in e-sports despite its unquestionable significance. If this is actually a non-desirable situation, however, will be discussed infra in the paper.

3.1.3. The legal classification of an e-sports match played in a tournament

So far, we have found that individual plays count as performances of the audiovisual elements of the game. This finding is of great practical relevance as it applies to the activities of many professional players who make a living by making their plays of electronic games, usually accompanied by some kind of commentary, available to the public. However, e-sports taking place within the context of leagues and tournaments is more complex. Here, further parties contribute to the final product “e-sports match”, contributions that need to be considered for its legal classification. Additional elements especially involve a more refined visual coverage of the

100 Supra note 6 at 1574. 
103 Supra note 6 at 1572.
104 Infra at 47 et seq.
matches and comprehensive commentary by designated third parties. Therefore, recordings of such e-sports coverage could qualify as motion pictures within the meaning of 17 U.S.C. §101 if the exhibit originality. As such they could be copyrightable content. However, this requires originality. Furthermore, the use of the audiovisual content of the respective electronic game as a basis, being owned by the publisher, could pose a challenge to copyrightability.

3.1.3.1. Originality in e-sports coverage?

In order to be original, e-sports coverage must contain creativity. There is no case law that determines how such coverage, being comprised of the play, the use of different camera angles and complemented with overlying commentary should be classified within copyright law. However, due to the obvious parallels to traditional sports games, it seems anything but farfetched to look into court decisions from this area for answers. It is firmly established that the broadcast of traditional sports events generally constitutes a copyrightable work as a motion picture. The House Report states: “When a football game is being covered by four television cameras, with a director guiding the activities of the foul' cameramen and choosing which of their electronic images are sent out to the public and in what order, there is little doubt that what the cameramen and the director are doing constitutes 'authorship.'”

One major factor is thus, the deliberate arrangement of the found content by use of different camera angles. The same can be found in e-sports coverage: Spectators of e-sports that are logged into the matches as such are usually not confined to view simply what one of the players sees on his screen. Instead, the play as a whole can be observed independently from a bird's-eye view, like to a virtual camera which moves above the playing field. This “camera” is not

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105 Supra note 38 at 52; See also Baltimore supra note 86 at 668.
necessarily static but might be able to change angles and move in and out of the action. Additionally, observers might have the opportunity to switch between the bird's-eye view and the view of the player(s), a change which is particularly profound in ego shooters where this means switching to a first person view which is available from the perspective of each of the respective players. Although this does not seem to be a common feature in e-sports so far, instant replays of particular scenes should technically be possible to include as well. The visual result is a composition of different camera angles which closely resembles the display of a traditional sports event on TV, an association which is further reinforced by the live commentary of one or two designated observers. As a result, typical e-sports coverage should be acknowledged to contain originality.\textsuperscript{106} Burk’s arguments against this finding, who only takes automatic changes of perspective which are determined by functionality rather than aesthetics into account,\textsuperscript{107} seem outdated. As a result, in cases where matches are not merely exhibited but at least to some extent artistically staged, live broadcasts qualify as motion pictures within the meaning of 17 U.S.C. §101 and should therefore generally be copyrightable pursuant to 17 U.S.C. §102(a)(6) as long as live coverage of plays is recorded (which it usually is in order to make it available as video on demand) so that the requirement for fixation is satisfied.\textsuperscript{108} The follow-up question is how use of existent copyrighted material in the game influences this result.

\subsection*{3.1.3.2. An e-sports broadcast as a joint work?}

E-sports broadcasts as a re-arrangement and combination of game content with additional

\textsuperscript{106} This finding is supported by \textit{WGN Continental Broadcasting Co. v. United Video, Inc.}, 693 F.2d 622, 627 (7th Circuit 1982) stating “that Congress probably wanted the courts to interpret the definitional provisions of the \textit{[Copyright Act]} flexibly, so that it would cover new technologies as they appeared, rather than to interpret those provisions narrowly and so force Congress periodically to update the act.”

\textsuperscript{107} \textit{Supra} note 6 at 1554.

\textsuperscript{108} See \textit{supra} note 86 at 674.
original elements could be a joint work. The result would be that each of the contributing authors, the publisher and the tournament organizer, both own an “undivided interest in the combination of their contributions.” Furthermore, assumption of a joint work would transfer a significant amount of control from the publisher towards the tournament organizer. Despite the absence of an agreement, the latter would have the right to exercise his exclusive rights in the product “e-sports coverage”, including the right to grant permission of use, without consent of the former.

Joint works are works which are “prepared by two or more authors with the intention that their contributions be merged into inseparable or interdependent parts of a unitary whole” (17 U.SC. §101). The main obstacle is the requirement of intent which needs to exist simultaneously when the work is written. While a tournament organizer would hardly deny such intent, this generally seems less likely for publishers. Especially, as will be seen in more detail infra, the publisher’s licences tend to assume a broad retention of rights as to the use of their games. Therefore a common intent among them and tournament organizers to collectively create e-sports coverage as a joint work cannot be found.

3.1.3.3. An e-sports broadcast as a derivative work?

Alternatively, e-sports broadcasts could be derivative works. This would mean two things: First, the tournament organizer would only be granted copyright protection exclusively for the original elements provided by himself whereas the pre-existing game elements entirely remain property

109 See Nimmer § 6.05.
111 Supra note 109.
112 See Burk supra note 6 at 1549 who comes to a similar conclusion with respect to electronic game performances.
of the original creator (17 U.S.C. §103(b)). Second, and most importantly, preparation of a derivative work without consent of the original creator poses a copyright infringement (17 U.S.C. §§106(2), 501(a)). As a result, the publisher would be able to condition any use of his game for e-sports tournament coverage or could deny permission to use altogether. Control over the production and the subsequent use of any e-sports material would thereby be conferred onto the publisher.

As e-sports tournament broadcasts make great use of the visual material and sound recordings of the game, they substantially copy from its copyrighted elements. Therefore, they are based upon the game as a pre-existing work.113 Furthermore, the game needs to be transformed, recast or adapted. The performances as such do not satisfy this requirement. However, by use of different camera angles, the visual content of the game is transformed. Furthermore, commentary is added to the performance. Commentary upon a pre-existing work as such does not constitute a derivative work as it usually does not appropriate expression from it. Commentary is thus rather supplementary than derivative.114 However, in an e-sports broadcast, it is combined with the presentation of the match into a new audiovisual work. Without the visual input from the match as the referential content, it would be all but useless. Therefore, commentary in e-sports serves as a means for the game’s transformation as well. In conclusion, e-sports broadcasts seem to be a type of derivative work which Samuelson has termed “faithful renditions”, an operation in the same genre (here: motion pictures) which is, designed for a different market segment (passive consumption rather than active playing).115

113 See Nimmer § 3.01.
115 See ibid. at 1519.
This finding is consistent with the legal qualification of so called “machinima.” The term describes the (re-)composition of in game videos and game play footage, often complemented by music or voiceover narration, into a film.\textsuperscript{116} As such, machinima is considered to be a derivative work.\textsuperscript{117} Although the intent behind it, creating art on the one hand in contrast to coverage and broadcasting of plays on the other, might not be the same, the activity as such strongly resembles what happens in e-sports. Therefore the two actions seem sufficiently comparable.

3.1.4. Potential infringements, the need for consent and limiting doctrines and defences

3.1.4.1. Introduction

Both publicly performing an audiovisual work and preparation of derivative works are exclusive right of the copyright owner (17 U.S.C. § 106(2), (4)) and thus any such acts without the owner's authorization pose a copyright infringement (17 U.S.C. § 501(a)). Therefore, these elements of professional e-sports marketing generally require the consent of the game publisher in the form of a licence. As the rightsholder is able to define the conditions under which the licence is given, he can not only control access to but also the way and the limits of use of his work.\textsuperscript{118}

Generally, one can assume that any licence accompanying the purchase of a game includes at

\textsuperscript{116} Supra note 44 at 73.
\textsuperscript{118} Supra note 44 at 83.
least an authorization to play the game. The issue in e-sports, however, is that it does not stop here. Individual plays of games are made available to a large group of spectators, the players’ performances are visually presented in a way that makes them more appealing to watch and live commentary and analysis is added. Participants thereby create further value but regularly also engage in commercial activities, at least partially driven by the anticipation of returns. All these aspects need to be considered and might change the legal framework which determines the publisher's ability to restrict the game's use and, correspondingly, users' and third parties' ability to produce and market e-sports.

In the following, I will first analyze the end user licence agreements (EULAs) of the electronic games Dota 2 and LoL as well as the one for Blizzard’s game platform battle.net which needs to be accepted before any of its games can be played. As a next step, I explore to what extent the power of the publisher to impose restrictions on the e-sports community is checked by copyright law's limiting doctrines and defences.

### 3.1.4.2. Licence agreements of electronic games – Three examples

The EULAs of LoL and battle.net provide for significant use and transfer restrictions as to any intellectual property being derived from the use of the games. For LoL, neither its EULA (subsequently EULA LoL) nor the incorporated (see EULA LoL s. II.) Terms of Use allow public performances or the creation of any derivative works and their broadcasting. EULA LOL s. I unambiguously states that the user “may not sell, copy, exchange, transfer, publish, assign or

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119 Supra note 9 (Comerford) at 625 et seq.
otherwise distribute anything you copy or derive from the Software or the Game.” As e-sports
depends on public performances which in turn entail distribution of game content, this clause
already renders e-sports events without a special individual licence an infringement of the
publisher's copyright. Furthermore, s. IV contains a reservation of all rights in connection with
the game. This expressly encompasses the creation of derivative works and thus the production
of e-sports broadcasts. Also, ss. I and III(D) prohibit any use for commercial purposes, therefore
pertaining to, inter alia, all tournaments that make entry conditional upon the payment of a fee
and any participation in a tournament in exchange for money. Thus both the professional
organization of and participation in e-sports events are thereby banned.

The EULA for the creation and use of an account to Blizzard Entertainment's battle.net122
(subsequently EULA battle.net), an online platform access to which is a necessary condition for
the purchase and play of all of the company's more recent games, largely includes similar
clauses as LoL (see EULA battle.net ss. 12 and 19, banning commercial use without express
authorization, s. 17, prohibiting the creation of derivative works). Other than the latter, however,
its s. 28(2.) expressly grants a licence for the organization of so called “community
tournaments.” However, this licence is subject to a number of conditions and especially does not
encompass the organization of professional e-sports as the maximum total of price money must
not exceed the relatively small sum of USD 10,000 (EULA battle.net s. 28(2.)(1.)) and entry has
to be free of charge (EULA battle.net s. 28(2.)(3.)). Notably, only the organization and
broadcasting of such tournaments is mentioned in the agreement which is of little value if the
players are not entitled to publicly perform.123 Contrary to the two examples supra, the so called

visited on August 13, 2015).
123 Limited to the scope of the clause, however, an implied licence to publicly perform can be assumed, because
otherwise it would make no sense to include it in the first place (see more generally regarding the implied
licence doctrine infra at 41 et seq.)
“legal information”\textsuperscript{124} for the game Dota 2 are kept extremely short. However, as neither public performance nor the creation of derivative works in the form of tournament broadcasts is mentioned, this simply leaves the standard statutory rule that both rights are assigned to the original author unaltered and makes both actions’ legality dependent on his prior permission.

Based on their licence agreements, game publishers thus retain full control over both public participation in competitive playing in and broadcasting of most e-sports activities, especially when played professionally and exploited for commercial purposes. No e-sports tournament can generally take place without their prior permission. Theoretically, game publishers could stifle use of their games in e-sports completely, an option which, however, is not viable as the companies have strong interest in a thriving e-sports scene making use of their games. To achieve this they can plan and implement the necessary structures themselves which would guarantee maximum control over the process of production and dissemination of all of the produced content. This is an alternative that \textit{Valve Corporation} has chosen for its tournament \textit{The International}\textsuperscript{125} which is exclusively hosted by it. More often, however, publishers have settled on co-operations with professional tournament organizers.\textsuperscript{126}

The degree of the publishers' involvement can be significant. E.g., Riot Games has created a 60 pages long rulebook\textsuperscript{127} which must be complied with by all major actors (including head coaches, managers, owners, starters and reserve players of the participating teams) who are involved in activities in its tournament \textit{League of Legends Championship Series}.\textsuperscript{128} For

\textsuperscript{124} \url{http://www.valvesoftware.com/legal.html} (last visited August 13, 2015).
\textsuperscript{125} \url{http://www.dotat2.com/international/overview/?l=english} (last visited August 13, 2015).
\textsuperscript{126} \textit{Supra} note 24.
\textsuperscript{128} \textit{Ibid.} at \textit{Introduction and Purpose} (p. 5).
example, all teams must pay each of their starting players a compensation of at least US$12,500.\textsuperscript{129} However, a clause that prohibits teams and players to play for competing leagues or tournaments (as can still be read on the German Version of Wikipedia\textsuperscript{130}) cannot be found.

As a general tendency, it seems that corresponding to the increasing importance of e-sports as a source of revenue both investments into its organization and development and game publishers' assertiveness as to the protection of their intellectual property have been growing.\textsuperscript{131} Concurrently, tournament organizers have intensified their cooperation.\textsuperscript{132} This move could be interpreted as an attempt to strengthen their negotiating position in the market in relation to game publishers.

3.1.4.3. \textbf{Limiting doctrines and defences}

If any play within e-sports requires the publisher's consent, this would mean that the latter could completely frustrate any kind of e-sports activities if he so desires. However, copyright law might limit the publisher's ability to do so. This question shall be explored in the following.

3.1.4.3.1. \textbf{The first sale doctrine}

The first sale doctrine, allowing owners of a work's copy to sell or otherwise dispose this copy

\begin{footnotesize}
\begin{enumerate}
\item Ibid. at s. 2.2.
\item Only in 2012, Taylor described the two publisher organizing the game conventions Quakecon and Blizzcon as “rare examples of game developers being actively engaged in integrating pro gaming into their official view of how their products circulate among consumers” (\textit{supra} note 2 at 204 et seq.)
\end{enumerate}
\end{footnotesize}
(17 U.S.C. § 109(a)), is not applicable. It has been held that purchasers of computer software only license the copy of the software and are thus not “owners” within the meaning of 17 U.S.C. § 109(a) if the copyright owner specifies that the user is granted a license, significantly restricts the user’s ability to transfer the software and imposes notable use restrictions. These three conditions are often satisfied in practice. If the decision of the Ninth Circuit is correct, is questionable. § 109(a) clearly refers to ownership of the “particular copy” which, according to 17 U.S.C. §101 is “material object [...] in which a work is fixed” which is distinct from the copyright. While a licence agreement might apply to the latter, ownership of the physical storage device of the data embodying the work is still transferred to the licensee. This is especially obvious when software is made accessible by allowing its code to be downloaded onto the licensee's hard drive. Clearly, ownership of the hard drive disk is not affected by such an act. However, it is widely accepted that the doctrine only poses a limitation to the distribution right and, especially, does not apply to public performances or the preparation of derivative works.

The right to publicly display a copy (17 U.S.C. § 109(c)) does not apply in the context of e-sports. Like subsection (a) it requires ownership. Furthermore, the found qualification of plays as performances precludes one as a display.

17 U.S.C. § 109(e) expressly refers to public performances of “electronic audiovisual games.” However, according to the Computer Software Rental Amendments Act of 1990 (Pub. L. No. 101-650, 104 Stat. 5089, 5135), it “shall not apply to public performances or displays that occur

133 Supra note 40 at 1111.
134 See supra at 30 et seq. However, see also that Dota 2 does impose not any significant licence restrictions onto its users.
135 See Nimmer § 8.08[B][1][c][i].
136 Nimmer § 8.12[F].
137 See argument with respect to 17 U.S.C. § 109(a) supra.
on or after October 1, 1995”\(^{138}\) and is thus, *inter alia*, not applicable to current e-sports events.

### 3.1.4.3.2. 17 U.S.C. § 110

17 U.S.C. § 110 contains a number of statutory exemptions to the performance right, however, none of them apply in the context of e-sports. Its subsection 4 could be considered for non-commercial e-sports tournaments which can only be watched by physically present spectators so that the prohibitions of a “commercial advantage” and “transmission to the public” would be observed. However, even in these few cases, due to electronic game's second layer of protection as audiovisual works, the limitation of the provision to literary and musical works could not be overcome.

### 3.1.4.3.3. E-sports as fair use?

This leaves the fair use defence (17 U.S.C. § 107) as another option to allow e-sports tournaments to be held and disseminated free from publishers' intervention. As the provision encompasses all rights specified in 17 U.S.C. § 106, it applies to both public performances and the preparation of derivative works. However, the decision to subsume a certain use under the section requires a comprehensive balancing of all circumstances of the case which shall, *inter alia*, include consideration of the following. These, in turn, need to be explored and weighed together “in light of the purposes of copyright.”\(^{139}\)

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Furthermore, its scope of application is restricted to games that are “intended for use in coin operated equipment.” This somehow curious limitation might seem strange but results from legislative history of this subsection which was a direct reaction from Congress to Red Baron (see Nimmer § 8.15[I]).

139 *Campbell v. Acuff-Rose Music* 510 U.S. 569, 578 (1994); see also *supra* note 44 at 104.
the purpose and character of the use, including whether such use is of a commercial nature or is for non-profit educational purposes;

- the nature of the copyrighted work;

- the amount and substantiality of the portion used in relation to the copyrighted work as a whole;

- the effect of the use upon the potential market for or value of the copyrighted work.

The enumerated purposes are not exhaustive; however, courts have found that what is described is the criterion of “productive use” which refers to the making of an original contribution.¹⁴⁰ This clearly applies to e-sports tournaments if they make sufficient use of additional creative elements to present the matches so that the outcome can be deemed a derivative work. However, productive use has also been construed more broadly as “transformative use”, i.e. the addition of new expression, meaning, or message.¹⁴¹ There is no threshold of originality comparable to the creation of a derivative work. Instead, the extent of transformation needs to be determined on a progressive scale.¹⁴² Therefore, even mere game performances that are streamed without any additional elements could probably claim some, albeit small, amount of transformative use.

This paper focuses primarily on e-sports as a professional, commercial endeavour. Courts have expressed strong opposition to commercial use as fair use¹⁴³ (although Campbell clarified that commercialism can be outweighed just like any other factor¹⁴⁴). This is especially problematic for professional tournament organizers but also for all players who stream their games in order

¹⁴⁰ Nimmer § 13.05[A][1][b].
¹⁴¹ Supra note 139 (Campbell) at 579.
¹⁴² Ibid.
¹⁴³ See e.g. Sony Corp. v. Universal City Studios 464 U.S. 417, 451 (1984), stating that “every commercial use of copyrighted material is presumptively an unfair exploitation.”
¹⁴⁴ Supra note 139 (Campbell) at 579.
to make a return from the video platform, advertising or subscriptions. Even mere e-sports enthusiasts who organize tournaments without any goal of financial gains could be considered to work within the scope of commerciality. In *Lish v. Harper* a non-profit organization which sold magazines that contained copyrighted content but ultimately operated at a loss was denied the fair use defence due to the supposedly commercial nature of its actions.\(^{145}\) Organizing e-sports events necessarily creates financial burdens and thus some kind of revenue is needed to cover these costs and would thus not qualify as fair use. Excluding all events that need some kind of financing, however, would undermine the defence. Thus, a comprehensive evaluation of the endeavour as a whole should be undertaken in order to determine if it is commercial in nature. If this argument would be accepted by the judiciary, however, remains to be seen.

The second criterion, the nature of the work, confers the more protection the more creative, i.e. non-functional a work is.\(^{146}\) All elements of a computer game are functional as far as they represent the implementation of the rules of the game. However, especially in today's complex graphical games, they are concurrently creative because a certain action sequence, e.g. the shooting of a weapon, can be presented in an almost infinite number of ways. Depending on the particular game as well as the court's preferences, the nature-criterion could be answered in favour of either of the parties. As it is usually given lesser weight within the analysis of fair use,\(^{147}\) the question of creativity, however, should not be crucial in most cases.

As e-sports normally incorporates a great amount of a game’s audiovisual elements and broadcasts largely depend on these in their presentation of the matches, the third argument, amount and substantiality of the used portion of the work, speaks strongly against fair use. One


\(^{146}\) Nimmer § 13.05[A][2][a]

\(^{147}\) *Ibid.*
may argue that game elements can be combined in almost infinite ways and that each play thus represents all but a small fraction of the game. This argument, however, has already been rejected by the courts within the assessment of electronic games’ originality. It is perfectly imaginable that not the original game but a modification is used as the basis of an e-sports event and that therefore the used portion of copyrighted material is only small. However, in the current e-sports scene, use of original games seems significantly more prevalent.

A more complex question is to what extent a game's potential market is affected by e-sports. The traditional market for games is selling them to people who feel inclined to play them. E-sports, however, is a separate market defined by the passive consumption of competitive gaming by third parties. At first sight, the answer seems simple. E-sports has no effect on the game's market or might even increase it by raising the popularity of the game. In practice, however, things are far from such clarity. It is very well imaginable that a game is exclusively developed to serve as a basis for e-sport activities. In fact, the aforementioned games Dota II and LoL do not include a single player campaign but can only be played with and against other humans. While this still caters to the traditional purpose of active play, these games (and similarly Starcraft II) are also equipped with a number of features to simplify their use in e-sports and enhance the experience for spectators, strongly indicating that the publishers do not view players as their only target group. Furthermore, while Starcraft II has been traditionally sold to its players, the marketing concepts of Dota II and LoL are notable because these games are distributed free of charge. Revenue is then created from the selling of additional, downloadable

148 Recently, crowdfunding where individuals contribute to the development of the game either as investors, early purchasers or simply as game aficionados has become an increasingly popular source of capital. Nevertheless, the basic concept, receiving money in return for a game to play, remains the same.

149 For example user interface for observers in Starcraft II includes several varieties allowing either a more streamlined look or one with additional statistical information about the match such as the units lost which makes it easier for both private observers but especially commentators to analyze the action (see patch notes 2.0.10 for Starcraft II; http://us.battle.net/sc2/en/game/patch-notes/2-0-10, last visited on August 30, 2015).
content (DLC). Their publishers combine and manage two adjacent markets which exhibit interdependencies. Similarly to the selling of DLC, e-sports could be considered an adjacent market of the distribution market. Under this premise, the effects of independent tournaments would be significant. As market impact is the central factor within the fair use analysis, definition of the right market is highly significant.

As every use of a work necessarily takes place within a potential market defined by the use, there need to be additional factors to ascertain the referential market. One approach could be a subjective one, taking heed of the publisher's intent. Such intent might be difficult to pin down. However, in current cases such as the aforementioned electronic games, statements of publishers, the games' design and especially the factual engagement of the companies in e-sports clearly point toward their intention to develop the e-sports market. Alternatively, the market could be determined objectively based on criteria such as the “traditional, reasonable, or likely to be developed market.” However, this approach will hardly change the result as long as a game's design is clearly developed to accommodate e-sports activities and especially where publishers are already engaged in such activities themselves. In conclusion, as long as there are sufficient indicators that a game is supposed to cater to the use in e-sports, the relevant market


DLC can serve different purposes, e.g. allow extra game play (additional levels or playable characters) or to speed up progress in the game, enhance the gaming experience in an aesthetic way (additional skins) or gaining a competitive advantage over other players (“pay-to-win”).

151 Nimmer § 13.05[A][4].


153 See e.g. a Forbes interview with Dustin Beck, Riot Games’ Vice President of e-sports, where he discusses the publisher's plans to develop their game's e-sports scene in the future (Daniel Track, “Riot Games, 'League of Legends', And The Future Of eSports,” Forbes, September 4, 2013 (http://www.forbes.com/sites/danieltack/2013/09/04/riot-games-league-of-legends-and-the-future-of-esports/ (last visited on August 30, 2015)).

154 Supra note 149.

155 American Geophysical Union v. Texaco Inc. 60 F.3d 913, 930 (2nd Circuit 1994).
of the game should include the one for e-sports tournaments.

There is no preceding case law and only very few scholarly works touch upon the question of e-sports as fair use. At first sight, *Allen vs. Academic Games League of America Inc.*\(^\text{156}\) seems to apply as precedent where the public playing of board game is considered to be fair use. However, the only market that the court considered was the one for game distribution, not the one of watching the players play which simply did not exist. Correspondingly, as playing as such was the only examined activity, it could refer to the educational value of playing and did not need to consider the purpose of presenting the plays to third parties. Therefore, the decision does not contain the considerations which necessarily have to be taken within the context of e-sports.

As the concept is broad and malleable,\(^\text{157}\) it is difficult to predict a definitive outcome before the courts.\(^\text{158}\) However, based on the analysis undertaken *supra*, there is much to support the assertion that non-commercial e-sports activities may generally be subsumed under the fair use doctrine whereas it is highly unlikely that the same would be held for the commercial exploitation of an electronic game for e-sports purposes. As professional e-sports plays and tournaments are clearly about the creation of a profit, the criterion of commerciality speaks strongly against fair use in this regard. Furthermore, market impact is strong. In exceptional cases where e-sports activities have never been an option for the publisher, things might be different. However, for today’s popular e-sports games, this is not the case. There is no doubt that the publishers of these games intend and do already develop the e-sports market for their

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156 *Supra* note 77.
157 *Supra* note 44 at 105.
own benefit. And last, there are no further considerations which could decisively outweigh this finding. Especially the amount of transformation does not seem high. Although there may well be originality in the broadcasting, the play as such as the major element, being only a performance of the original work, exhibits only little transformative elements.

Non-commercial tournaments, on the other hand, will normally not have any strong effects upon the e-sports market. This might seem false in the abstract as non-commerciality evokes the idea of cheap supply and thus the potential to obtain a high market share. However, without commercial exploitation of the game it is hardly possible to obtain the financial resources to finance tournaments which could seriously compete with the publishers’ ones. As a result, such tournaments would almost necessarily be limited to the amateur scene. Also, as such tournaments would be about the participation as such rather than the creation of e-sports as a good to be supplied to third parties, similar as in Allen, the use for education and private enjoyment could be emphasized a lot stronger than in professional e-sports. In the end, the particular facts of each case will have to be evaluated. However, as long as there is clearly no financial interest given and the smaller a tournament is, the more likely it is that it will fall under the fair use doctrine.

3.1.4.3.4. Presumption of an implied licence?

In cases where the seller of a product containing copyright protected works does not confer a licence, one would find oneself in a situation where one could not make use a product one just paid for. In order to avoid such absurd results, there is a general assumption that the necessary
licence is implied in the agreement.\textsuperscript{159} For example, when someone makes his website publicly available, there is an implied licence that visitors may download its content onto their computers in order to be able to view it.\textsuperscript{160} Similarly, when a game is bought, the buyer also acquires a licence to play it.\textsuperscript{161} However, the issue in e-sports is not whether a game can be played at all but if played matches can be made available to the public as well as commercially exploited without explicit consent of the rightsholder. Generally speaking, the implied licence doctrine confers the right to use a work in a “normal and natural manner” which is defined by the nature of the work\textsuperscript{162} and the objective of the original sale.\textsuperscript{163} At least in traditional electronic games, containing both a single player and a multiplayer mode, finding an implied licence extending to their public performance as a means commercial exploitation would be difficult to justify as the game could still be played without any limitation and that would have to be considered the objective of the sale.

However, games like Dota 2 or LoL are exclusively designed for groups of players to compete in multiplayer battles, i.e. the use for e-sports in a broader sense as a means of competitive human interaction. This interaction is therefore the core objective of their purchase. But does the objective extend to public performances and commercial exploitation? With respect to software,

\textsuperscript{159} David Nimmer, Brains and Other Paraphernalia of the Digital Age, 10 Harv. J. Law and Tec 1 (1996) at 20.
\textsuperscript{160} Lawrence S. Pinsky, “Aspects of Intellectual Property Law for HEP Software Developers,” in: From the Web to the Grid and Beyond (Springer 2012) 201, 213.
\textsuperscript{161} As only the right to public performances is included in 17 U.S.C. § 106, playing an electronic game in private, i.e. not in public, cannot infringe a publisher’s copyright in the audiovisual elements of the game. However, here, the other layer of protection, protection of the underlying code, becomes relevant. As playing necessarily requires loading parts of the code into the RAM of the computer for more than a momentary time span (see supra note 40 at 1109), the player is dependent on reproducing these parts within the meaning of 17 U.S.C. § 106 (supra note 160 at 212) in order to make use the game. At least according to the Ninth Circuit, 17 U.S.C. § 117(a)(1) does not apply in this context if the copyright owner grants “only a license to the copy of software and imposes significant restrictions on the purchaser's ability to redistribute or transfer that copy” (Wall Data v. Los Angeles County Sheriff's Dept., 447 F. 3D 769, 785 (9th Circuit 2006). Permission of such reproductions, however, is implied if not explicitly included in the licence in the first place (see Nimmer supra note 155, discussing the same issue with respect to the reading of literal works digitally stored on CD ROMs.)
\textsuperscript{162} Supra note 158 at 282.
\textsuperscript{163} Nimmer § 10.11[A] with further references.
the purpose of the purchase has been described as encompassing what is “essential for the proper competitive purpose”\(^\text{164}\) which includes commercial use as a necessary element of competition. The inclusion of software features that make the viewing of a match more appealing and simplify the production of live commenting\(^\text{165}\) can be seen as indicators for a broad implied licence. If you don’t want purchasers to use these features, why include them in the first place? However, two arguments speak against this conclusion: First, described features can also be used to watch the replay of a match in private either for fun or to gain further insights.\(^\text{166}\) And second, such an inference would create a socially undesirable incentive not to include these helpful features in the game software in order to avoid the assumption of an implied licence. In conclusion, while I find the argument for a broad definition of the objective of an e-sports game’s purchase not completely unconvincing, at least in the absence of special indications, it should not be adopted by the courts. Implied licences, while some forms of publication might be included, generally do not include commercial exploitation of playing.

On first sight, Allen seems to take a different stand. Its statement that “games are meant to be played”\(^\text{167}\) has been interpreted as the recognition of an implied licence for their use in tournaments.\(^\text{168}\) However, it is doubtful if the finding applies to professional e-sports. The court in Allen was not confronted with any commercial purpose of the play and especially there was no exploitation by making the plays public either to a local crowd or by broadcasting. Instead,

\(\text{164}\) Communications Corp. vs DGI Technologies, Inc., 81 F.3d 597, 601 (5th Circuit 1996) (emphases added).
\(\text{165}\) Such features include the possible use of a variety of camera angles, special observation modes to better follow the action as well as the availability of a number of statistical information.
\(\text{166}\) Of course, a replay still needs to be obtained which proposes that permission for publication of one’s plays to make them available for others to download is implied in the agreement. This argument, however, applies neither to further forms of publication such as broadcasting nor to the commercial exploitation of such publication.
\(\text{167}\) Supra note 77.
\(\text{168}\) Nimmer § 8.14[B][1] at note 34.4.
the purpose of the tournaments consisted entirely of competitive playing\textsuperscript{169} whereas in professional e-sports playing is primarily a means to an end.

Furthermore, even if the courts would follow the reasoning for a broad implied licence, its recognition could be easily avoided by the publisher. The implied licence doctrine has been created in order to supplement an agreement where it exhibited gaps with respect to the disputed question.\textsuperscript{170} Therefore, it does not apply to cases in which the copyright holder made his refusal to a certain use explicit so that there is no need for any supplementary interpretation of the contract.\textsuperscript{171} As a result, in situations where the publisher broadly retains his copyrights according to the licence agreement, one may not assume any implied permissions. Thus, in practice, the implied licence doctrine generally does not have the capacity to extend permissions for use in any significant way.

3.1.4.3.5. **Problem: No pre-emption of contractual claims**

So far, only the statutory scope of protection, granted but also subsequently slightly limited by the U.S. Copyright Act, has been analyzed. However, permissible use of computer software is also extensively governed by contracts, especially so called \textit{end user licence agreements} (EULAs) as seen \textit{supra}. This is possible due to two legal doctrines: First, computer software is not purchased in a technical sense but merely licensed.\textsuperscript{172} Second, it has been held that the pre-emption clause in 17 U.S.C. § 301(a) does not apply to contractual agreements between licensor and licensee.\textsuperscript{173} As a result, game publishers are generally free to preclude uses of their games

\textsuperscript{169} \textit{Supra} note 77.
\textsuperscript{170} \textit{Supra} note 158 at 276; \textit{supra} note 48 (Boyden) at 475 note 217.
\textsuperscript{171} \textit{Supra} note 158 at 277.
\textsuperscript{172} \textit{Supra} note 40 at 1111.
that would otherwise be legal under the Copyright Act's limitations.

It has been held that in cases where a copyright owner tries to extend its control beyond the clear limits of the Copyright Act, the copyright misuse doctrine could be applied in order to declare the respective licence clauses invalid.\textsuperscript{174} Copyright misuse may be based on antitrust or public policy considerations.\textsuperscript{175} However, it is unlikely that either category is applicable in the current context of e-sports. Regarding the antitrust based approach, it cannot be taken for granted that every publisher of electronic games may exert market power.\textsuperscript{176} Not every game creates its own market. Games which belong to the same genre are probably substitutable to some extent from the view of the players\textsuperscript{177} as well as the consumers of e-sports matches. Especially in cases like the highly popular Dota 2, LoL and the recently published game \textit{Heroes of the Storm}, which all belong to the \textit{Multiplayer online battle arena} (MOBA) genre, an assumption of market power seems difficult. Therefore, statements that base their argument on a supposed “monopoly” of the publisher without any further analysis\textsuperscript{178} seem incorrect. From a public policy perspective, it is impossible to view the simple retention of the performance or the derivative work right which are both statutorily protected, as misuse because the control conferred by law is not expanded.\textsuperscript{179}

Such considerations could apply where any use for e-sports purposes, even within the found

\textsuperscript{174} Supra note 159 at 23.
\textsuperscript{176} If there should be a presumption of market power conferred via IP rights is contested (see Ariel Katz, “Issues at the Interface of Antitrust and Intellectual Property Laws” (2005) at 70 et seq.).
\textsuperscript{177} This can be seen when players switch from one game to the next when the former’s popularity is fading; see e.g. the career of the professional e-sports player Manuel “Grubby” Schenkhuizen who has switched from Warcraft 3 to Starcraft II to Heroes of the Storm (\url{https://en.wikipedia.org/wiki/Grubby}). This ability to switch from one game to another also mitigates potential lock-in concerns of players that made a lot of effort to master a certain game. The learned abilities seem to be general enough that they can be applied in different contexts.
\textsuperscript{179} See \textit{supra} note 175 at 899.
limited scope of fair use, is frustrated by the licence agreement. However, even then, professional e-sports as a commercial endeavour would not be included in the licence.

3.1.4.3.6. Conclusion

Based on current copyright law, publishers of electronic games can exert control over the creation and the use of content derived from their game software. As their power reaches far into downstream markets beyond the one of their original products, this could be described as deep control. By control over content, they can determine even small details of professional e-sports organization either through conditioning of their licences or by organizing tournaments and leagues directly. This is made possible by a number of interdependent statutory provisions and judicial findings which create a complex, multi-layered protective environment for their products: First of all, games benefit from their dual qualification as literary and audiovisual works. Especially the latter leads to strong protection. Although formally only the audiovisual elements enjoy copyrightability, de facto the game as such cannot be used by third parties as any use generally infringes the copyright in these elements. Of course the underlying system of rules may be copied by development of a substitute but this requires high investments. Court decisions allow the publishers to exploit their copyright in order to impose strict licence agreements onto the players to expand this control further. It is not entirely clear to what extent limiting doctrines such as fair use, implied licences and copyright misuse can limit this amount of control. Case law is rare and application dependent on the particular circumstances of each case. However, it is highly unlikely that professional e-sports tournaments could be conducted freely under these rules. Only extreme cases which interfere strongly with player’s statutory

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180 Ibid. at 931, proposing a per-se rule against fair-use limitations.
rights or highly restrict competition seem to be prohibited. Whether this is actually a problem or can be justified by economic arguments will be analyzed *infra* in chapter 4.

### 3.2. Trademark Law

Besides copyright law, trademark law could potentially limit the ability to use an electronic game for professional e-sports because use of the game’s name is generally necessary to promote and describe the competitions. Potential issues have already been discussed by Rothman[^1] which is why I refrain from further analysis. Briefly summarized, the major question is if the doctrine of “initial interest confusion”, describing interest, attraction or distraction by a defendant’s product due to association with the plaintiff’s trademark, should apply in the context of e-sports.[^2] Rothman rejects this notion, arguing that either the doctrine should be dismissed altogether[^3] or at least because use should be protected under the fair use defense.[^4]

### 4. Economic Analysis

As could be seen, a purely internal analysis leaves more than one possible solution regarding the ownership of e-sports. Statutory regulation is too abstract to give clear guidance. Furthermore, case law dealing with the specific issues of the e-sports environment does not exist[^5] and findings from adjacent areas seem too incoherent to substitute for this. On the following pages, I

[^2]: Ibid. at 323 et seq.
[^3]: Ibid. at 324.
[^4]: Ibid. at 325.
[^5]: This holds true at least for the US. It would be highly interesting to see how foreign jurisdictions have possibly dealt with the raised questions. However, it would exceed the scope of this paper to include a comparative analysis as well and is thus an endeavour left for the future.
thus engage in an external analysis which is primarily based on an economic approach to determine to what extent exclusionary rights should be conferred. Evaluative reference shall be total welfare maximization. As so often in intellectual property law, this objective needs to take particular account of the tension between dynamic efficiency, generated via copyright protection as an incentive to create, and static efficiency, i.e. utmost possible dissemination of works. However, in addition, there is also a conflict of interests between the multiplicity of creator groups, representing a tension regarding the right balance of freedoms among contributors to dynamic efficiency. This conflict is especially strong between the publisher as an original and the many participants of e-sports as subsequent creators. Whether copyright law’s answer to this conflict is an efficient one, is analyzed in part 4.1. In the next part, I assess if the curious case of the players without rights. It seems rather irritating that such major contributors to e-sports are the only ones who seem unprotected by IP law (4.2.).

4.1. Efficiency of publisher control – The economics of subsequent use

Publishers can exert deep control beyond the market of the original product into e-sports as a downstream market. Such control entails detrimental consequences with respect to both dynamic and static efficiency. Transaction costs, resulting from the need to obtain permission from the owner, inhibit innovation in e-sports if they exceed the expected benefits of the potential user; as a result, market economy’s advantage to exploit the decentralized knowledge of society is impeded. Furthermore, reduced competition due to fewer competitors alleviates pressure to innovate. The same factors reduce the total number of available e-sports matches and make their consumption more costly, thereby reducing static efficiency.

186 These transaction costs are comprised of the actual licensing costs and so called “search costs.” The latter encompass the costs of ascertaining the need for a licence, finding the owner or potential user as well as the costs negotiation.
These disadvantages need to be balanced against potential advantages. The most obvious one is that deep control into downstream markets increases potential rewards for authors and thus their incentive to create the original product.\footnote{187 Derek Bambauer, “Faulty Math: The Economics of Legalizing the Grey Album,” Wayne State University Law School Legal Studies Research Paper Series No. 07-18 (2007) at 31.} However, whether this effect is of any practical significance has been doubted.\footnote{188 Ibid. at 46.} Indeed, it is highly unlikely that creators of earlier games such as Starcraft I or Counterstrike were able to anticipate their long-term success in e-sports and saw this expectation as a considerable incentive to develop them. On the other hand, however, this paper has referred to several more recent games which are clearly designed for e-sports purposes including its professional subculture. The publishers of these games probably took anticipated revenue generated from e-sports into consideration before development (or at least future publishers may very well do so). The incentivizing effects from deep control over content should thus not be underestimated.

Another important consideration is that its effect on transaction costs is not one-directional. Game distribution and supplying e-sports as a viewable good are two separate markets which, however, exhibit certain positive interdependencies: First, casual gamers may have more fun playing and may gain insights about game mechanics by watching professional e-sports which means that more people play it.\footnote{189 See supra note 9 (Comerford) at 629 et seq, describing the mechanism regarding Blizzard’s game Starcraft in South Korea.} Second, a rising number of casual players means higher consumption of e-sports matches as persons who play the game should generally feel more inclined to watch others play as well. These interdependencies strongly resemble indirect network effects which describe a situation where the size of one user group of a certain good affects the size of another and vice versa.\footnote{190 See OECD Secretariat, “Executive Summary,” in: OECD Directorate for Financial and Enterprise Affairs: The Digital Economy, February 7, 2013 at 8 (http://www.oecd.org/daf/competition/the-digital-economy-2012.pdf).} As positive externalities, indirect network effects
are generally not considered by either user group and negotiations may be inhibited due to high transaction costs which results in undersupply. E.g., all e-sports organizers would have to negotiate with publishers to reduce the price of their games for a share of their returns, while the latter would also require an agreement among each other about the internal distribution of such payments. In this situation, the publisher can instead function as a platform who internalizes described indirect network effects by governing both sides,\(^{191}\) i.e. the game distribution market and the market for e-sports. Especially, the publishers can engage in price discrimination and cross-subsidization. E.g., it is imaginable that the game could be distributed for a loss which however could be over-compensated by higher returns from the e-sports market. Similar current marketing strategies where income is generated from the selling of DLC rather than the game itself exemplify the validity of such concepts.

The analysis suggests that negative effects on efficiency from publishers’ deep control could be compensated through increased incentives to create e-sports games and the internalization of positive external effects resulting from interdependencies between the two markets “game distribution” and “e-sports”. Whether this is actually the case, is an empirical question and cannot be answered for certain in the abstract. However, taking into account the economic significance of today’s professional e-sports market, publishers likely take these additional returns into consideration. Correspondingly, the potential for cross-subsidization of games’ development through later returns from the marketing of e-sports seems considerable.

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4.2. Is there the need for player protection?

4.2.1. No market failure

It may be irritating that the law does not assign any exclusion rights to such significant contributors to the product e-sports as the players, especially since this stands in notable contrast to game publishers but also tournament organizers who both can assert a copyright in that regard. However, from an economic point of view, this is only a problem of IP law if there is market failure in the form of potential freeriding which would reduce the incentive to engage in creative activities. Such market failure, however, does not exist. Freeriding by third parties cannot occur because played e-sports matches are not without an owner. Performances of an electronic game contain copyrighted material from this game which is still protected by the copyright of its owner, i.e. the publisher. The latter can therefore exert control over any fixation of these performances as his work within the limits of 17 U.S.C. §§ 106 et seq.192

4.2.2. Initial distribution of rights and efficiency

While freeriding constitutes a potential problem with respect to third parties, the assignment of rights in the internal relationship between publisher and player could be another. One may fear that the found one-sidedness in that regard could lead to inefficient use of the resource “game” for the production of e-sports or could deem it unfair that the former has all, the latter, however, have no control via intellectual property law over content which they both contributed to. The first concern refers to the relationship between initial assignment of rights and their efficient

192 See Justice Blackmun’s dissent in Sony Corp. v. Universal City Studios 464, 480 U.S. 417 (1984), stating that the Copyright Act “grants the copyright owner the exclusive right to control the performance.”
allocation. Ronald Coase has shown that, in the absence of transaction costs, the initial assignment of rights does not affect their allocation due to the possibility of bargaining, the outcome of which is determined by efficiency.\textsuperscript{193} Therefore, the one-sided assignment of ownership to the publisher does not raise concerns regarding allocative efficiency per se. Of course, in reality, transaction costs persist. Therefore, rights should be assigned to the person who can engage in bargaining over their allocation for the lowest costs. This person is generally deemed to be the original author, especially because potential users only need to negotiate with on single entity.\textsuperscript{194} Thus, the existence of transaction costs supports the current structure of copyright law which vests the publisher with initial control.

The second issue, fairness, refers to the internal distribution of revenue created from the commercial exploitation of e-sports. First of all, it is necessary to realize that absence of copyrights does not mean that players are left powerless. Despite the lack of legal control via IP law, they can exert market power by threatening to withhold their input just like any other participant in a market transaction. A successful example for this is the conflict between Riot Games and the professional players it had under contract, described \textit{supra.}\textsuperscript{195} Indeed, at least based on classic economics under a homo economicus approach, internal distribution should be independent from the initial rights allocation.\textsuperscript{196}

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\textsuperscript{193} See Ronald F. Coase, “The Problem of Social Cost,” \textit{Journal of Law and Economics}, Vol. 3 (Oct., 1960) at p. 8 (“[…] without the establishment of this initial delimitation of rights there can be no market transactions […]. But the ultimate result […] is independent of the legal position”) and p. 15 (“[…] such a rearrangement of rights will always take place if it would lead to an increase in the value of production.”).


\textsuperscript{195} \textit{Supra} at 9.


This notion is challenged by behavioural psychology research according to which factors such as the endowment effect and adversity to loss, humans are more hesitant to give something up which they perceive as theirs than to forfeit something that would have to be obtained through bargaining; Frank B. Cross/Robert A. Prentice, \textit{“Law and Corporate Finance,”} Edward Elgar Publishing (2007) at 83.
\end{flushleft}
5. Conclusion

The legal questions surrounding the case of e-sports are manifold and touch upon a number of greater issues of today's copyright law as to the amount of control over intellectual property in general and in relation to newly arisen challenges as a result of fast-paced technical innovation in the information economy in particular.\textsuperscript{197} E.g., pertaining questions refer to the reasonableness of software protection via copyright law, the potential for private law regimes via contractual and technical means, the relationship between IP and antitrust law as well as the justifications for a derivative works right. Also exemplified is the debate over the need for openness in order to allow decentralized innovation vs. arguments referring to the owner’s ability to efficiently manage his content.

Unfortunately, neither the copyright code nor existent case law have been able to provide clear guidance. This paper has found publishers’ ability to deeply control creation and dissemination of e-sports (however, it has also pointed out that rights are not all in that regard and market forces can be a viable way to counter the power they confer). As this finding has been dependent on a number of legal decisions, none of which are set in stone, a different outcome might be within the reach of the current law.

Unfortunately, economic analysis provides arguments that also go both ways. On the one hand, the potential for transaction costs savings through publishers’ cross-market co-ordination seems a lot higher than in standard derivative works markets. On the other hand, the need for openness in order to harvest decentralized innovation should never be underestimated. The history of e-

\textsuperscript{197} See also Rothman \textit{supra} note 181 at 319, referring to e-sports as “a useful case study of alternative ways of thinking about technological changes and challenges to the IP system.”
sports is one which has been advanced by third parties, especially game enthusiasts, and – at least initially – not the publishers themselves. What good would increased efficiency be now if the e-sports market had never been created in the first place? To my own surprise, maybe the solution for this general conflict can be found in the current law and lies in the fair use doctrine. Taking into account especially the impact of a use into the original creator’s targeted market, the doctrine exhibits openness towards innovative use that the copyright owner had not contemplated before, thereby allowing innovation outside his sphere of control. Based on this argument, most likely the first but even subsequent, semi-commercial tournaments might have fallen under the fair use doctrine. Today, however, in a situation where e-sports is relatively firmly established, this evaluation had to change as publishers have started to develop the e-sports market themselves, enabling its efficient management after major steps in innovation have already occurred. Under this premise, fair use is not just an either-or doctrine but its answer may change with respect to the same object based on a different social and economic context. If this view is correct, maybe the copyright law has worked perfectly and the fact that the early independent e-sports activists have dug their own grave simultaneously with their growing success by drawing publishers’ attention towards their actions would only be an ironic historic side note.

However, whichever result one might prefer, it feels undesirable that control over the whole of an entertainment industry depends on interpretation of highly unpredictable doctrines such as fair use or copyright misuse. And in any way, the analysis exemplified the extraordinary complexity of today's copyright law. Every adherent to democratic and liberal values should feel concerned about this obvious lack of the law's ability to communicate potential legal ramifications and thus to efficiently govern the behavioural choices of the people. Maybe the solution to this problem would be a “back-to-the-basics” approach as has been suggested by
Rothman.198 Fewer and less complicated rules would necessarily entail solutions which might be imperfect in certain situations. However, this would come for the great benefit of more predictability which would most likely outweigh any individual shortcomings.

198 Supra note 177 at 328.
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