

LIVE SPORTS VIRTUAL REALITY BROADCASTS: COPYRIGHT AND OTHER PROTECTIONS

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ABSTRACT

As virtual reality rapidly progresses, broadcasts are able to increasingly mimic the experience of actually attending a game. As the technology advances and the viewer can freely move about the game and virtual reality can simulate the in-stadium attendance, the virtual reality broadcast nears the point where the broadcast is indistinguishable from the underlying game. Thus, novel copyright protection issues arise regarding the ability to protect the experience through copyright. Although normal broadcasts may be copyrighted, virtual reality broadcasts of live sports could lack protection under the Copyright Act because the elements of originality, authorship, and fixation are harder to satisfy for this type of work. If the elements that formerly protected broadcasts through copyright no longer apply, the virtual reality broadcast of the game will lose copyright protection. The virtual reality broadcaster can receive protection for the work in several ways, such as (1) by broadcaster-made modifications to the transmitted broadcast, (2) through misappropriation claims, or (3) by inserting contract terms. These additional steps maintain the ability of virtual reality broadcasters to disseminate works without fear the work will not be protectable by the law.

INTRODUCTION

As a result of its rapid development in the past few years, virtual reality (“VR”)¹ has neared viable mass production of the technology to consumers.² This technology has already begun to infiltrate

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¹ Virtual reality is defined as “an artificial environment which is experienced through sensory stimuli (such as sights and sounds) provided by a computer and in which one’s actions partially determine what happens in the environment.” *Virtual Reality*, Merriam-Webster’s Collegiate Dictionary (11th ed, 2009).

² Sean Gregory, *Watching the NBA in Virtual Reality is Surprisingly Good*, FORTUNE (Dec. 6, 2016), <http://fortune.com/2016/12/06/nba-nextvr-vr-virtual-reality/>.

broadcasts of live events, including in the sporting arena,³ but currently VR capabilities only allow the broadcaster to show viewers limited points of view instead of allowing access from all perspectives. Additionally, the rendering capabilities are such that the games do not feel fully realistic, and instead seem more like a video game than an athletic event.⁴ However, as the technology develops, experts believe VR will allow the viewer to feel as if she is in the stadium during the game.⁵ Users will soon become even more immersed into the VR environment because VR headsets are developing to include scent and touch sensory components.⁶

The copyright protection afforded to VR content is clear in the context of motion picture studios and video games created to include VR components because the content is original and the author of the work can easily be determined. However, the VR broadcast of live events do not fit clearly into copyright protection. Copyright requires a work not only to have creativity, authorship, and fixation to receive protection,⁷ but also to contain express choices beyond relaying facts.⁸ Additional precautionary measures are advised for those broadcasting these events. Copyright issues extend both to the broadcast itself and to the copyright ownership of any recordings individual viewers make of the broadcast.

When the technology develops to allow the viewer full 360-degree range of movement at the game, then the ability to copyright the VR broadcast may be determined by whether the underlying game can be copyrighted. Copyrights have traditionally required the material being protected to express some modicum of creativity beyond the inherent nature of the material itself.⁹ Live broadcasters

³ Benny Evangelista, *Virtual Reality Basketball Could be Future of Sports Broadcasting*, SAN FRANCISCO CHRONICLE, (Apr. 5, 2017), <http://www.sfchronicle.com/business/article/Virtual-reality-basketball-could-be-future-of-11053308.php>.

⁴ Jeremy Rellosa, *What It's Like Watching Sports in Virtual Reality*, WBUR, (Dec. 12, 2016), <http://www.wbur.org/onlyagame/2016/12/12/virtual-reality-nba-sports-future>.

⁵ Evangelista, *supra* note 3; Gregory, *supra* note 2.

⁶ Joel Stein, *Why Virtual Reality is About to Change the World*, TIME (Aug. 6, 2015), <http://time.com/3987022/why-virtual-reality-is-about-to-change-the-world/?pcd=hp-magmod>.

⁷ 17 U.S.C. § 101 (2012); 17 U.S.C. § 102 (2012).

⁸ Feist Publ'ns, Inc. v. Rural Tel. Serv. Co. Inc., 499 U.S. 340, 341 (1991).

⁹ *See id.*

traditionally satisfied this test by picking the angles and viewpoints from which the viewer experienced the game. However, as the viewer receives more choices, the creativity imbued in the product transfers from the broadcasters to the viewers. Additionally, live streams of VR sporting events where viewers decide their moves and create non-replicable experiences also results in issues regarding whether the broadcast qualifies as fixed. Finally, copyright ownership could extend to any viewer recording walkthroughs of her experience.

Broadcast issues could be addressed in multiple ways. Broadcasters could, even once the technology advances to allow the viewer to have free movement, force viewers to attend the game only from certain perspectives to satisfy creativity requirements. Forced perspectives additionally allow the broadcast to be fixed,¹⁰ as the specific viewpoints can be recorded and experienced again in the future.

Broadcasters of VR live events can also attempt to interlay augmented reality or other features to ensure the broadcast has plainly discernable edits to the stream of the event. The edits would display creative decisions departing from the underlying facts of the game. These augmentations could be simple—such as the inclusion of a visible first down line or the score with time remaining in the corner of the screen as seen on a television broadcast—but could also implement more complex features, such as introducing a social aspect to VR viewing of games. As discussed further in section B, embracing the inherent community aspect of sports by introducing a means to interact could add an element of creativity. Finally, along with these strategies, broadcasters can also make sure the technology they provide for the live broadcasts is protected under the anti-circumvention measures of the Digital Millennium Copyright Act. VR broadcasters can rely on contractual terms and licenses to protect rights as well.

¹⁰ Under 17 U.S.C. §102(A), for a work to receive protection is must be “fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”

A. Background and Development of Virtual Reality

VR, which for decades the public viewed as a product of the future, now approaches use on a large-scale commercial level.¹¹ As with other technologies, VR first became available as expensive equipment for a small subsection of early adopters. The technology could eventually become ubiquitous in the same way cell phones rapidly became widespread.¹² Although its potential is not fully realized, VR could be embraced as a necessary technology in the future.¹³ The technology needed for VR has already developed to attach smartphones to a pair of goggles, which allows for affordable rendering, although these smartphone-based devices have poorer quality than more complex equipment.¹⁴ VR goggles have companies currently researching to create devices with an increased number of pixels on the screen, improved power sources for screens, scent and touch functions, enhanced video clarity of the video, and virtual video capable cameras.¹⁵ This includes 360-degree video technology that stitches shots together and allows individuals to upload the rendered work made from those videos onto a VR section of YouTube.¹⁶ Developers have also considered combining VR with augmented reality.¹⁷

While this technology is becoming more accessible to a wider range of people, the graphics and pixilation available in the current VR content requires substantial improvement to give the viewer the feeling of an actual, as opposed to a digitized, environment.¹⁸ Before the dissemination of VR headsets becomes

¹¹ Stein, *supra* note 6.

¹² *Id.*

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.* Augmented reality is the “enhanced version of reality created by the use of technology to overlay digital information on an image of something being viewed through a device (such as a smartphone camera).” *Augmented Reality*, Merriam-Webster’s Collegiate Dictionary (11th ed, 2009). Examples of use in sports games include inserting a first downline for a football game or having the score imposed on the corner of a screen at all times. The overlay of digital information can also come in the form of advertisements that the broadcaster is paid to include in the broadcasted feed.

¹⁸ *Id.*

viable for a wider commercial base, manufacturers of VR technology need to address side-effects such as “nausea, disorientation, motion sickness, general discomfort, headaches, or other health issues.”¹⁹

B. The Current Status of Virtual Reality and Sporting Events

VR allows a viewer to experience a sporting event in a manner approximating actual attendance at a game.²⁰ Though issues still need to be addressed and the costs are high, to get this enhanced perspective, all that is needed is an app and a VR headset.²¹ VR technology has progressed to the level where broadcasting networks were able to provide solid VR coverage of the Rio Olympics, though the streamed events were largely unavailable until the day after the events took place.²² Also, VR coverage has expanded, especially with NextVR broadcasting the entire 2017-2018 NBA season²³ and other companies covering other big events.²⁴ The NBA now provides a VR broadcast once a week.²⁵ While the fees associated with using VR in conjunction with sports events make it quite expensive, the VR headset tunes out the outside world and allows the viewer to feel like the game is happening right in front of them.²⁶ Through these VR goggles, the viewer can view the game through different perspectives.²⁷ Some groups, such as FirstV1sion, even allow viewers to see the game through the perspective of players, though this technology for is still evolving and needs further refinement to prevent the viewer from becoming dizzy.²⁸

¹⁹ *Id.*

²⁰ Ben Dickson, *How Virtual Reality is Transforming the Sports Industry*, TECHCRUNCH, (Sept. 15, 2016), <https://techcrunch.com/2016/09/15/how-virtual-reality-is-transforming-the-sports-industry/>.

²¹ *Id.*

²² *Id.*

²³ Saqib Shah, *NBA will broadcast every game in VR this season*, ENGADGET, (Oct. 10, 2017), <https://www.engadget.com/2017/10/12/nba-vr-games-nextvr-app/>.

²⁴ Dickinson, *supra* note 20.

²⁵ Rellosa, *supra* note 4.

²⁶ Gregory, *supra* note 2.

²⁷ Dickson, *supra* note 20.

²⁸ *Id.*

Sports VR continues to progress in ways that will change the experience for both players and fans.²⁹ The currently the technology does not support dynamic movement through the captured work. It only reproduces reality from a static position.³⁰ This static position creates a latency effect, which is a delay time in viewing.³¹ Demand for VR will then increase and become more readily attainable to an ordinary person once the latency effect reduces.³² The spread of 5G telecommunication networks also could alleviate the lag time and allow for more commercially viable VR content and devices.³³ VR already allows the viewer to explore the entire stadium from multiple different perspectives, such as from the viewpoint of the players, fans, and officials.³⁴ Despite offering different perspectives to view the live event, VR sports broadcasts currently have the viewer rooted to a specific spot.³⁵ The use of VR broadcasts is then currently limited for the lay viewer. On the other hand, in spite of limited lay viewer viewpoints, VR technology has successfully allowed players on sports teams to understand techniques of their competitors, which serves as an alternative form of preparation to game tapes.³⁶ Additionally, some companies are already creating 3D rendering of arenas in a near realistic fashion, though this technology has not developed to the point where it can be used for full games;³⁷ however, experts believe that in ten years the technology will also allow the viewers to have more freedom of movement.³⁸

²⁹ Sally Jenkins, *Virtual Reality is Going to Change Sports for Players and Fans*, CONCORD MONITOR (Apr. 28, 2017), <http://www.concordmonitor.com/Virtual-reality-is-going-to-change-sports-for-fans-and-players-9571294>.

³⁰ *Id.*

³¹ *ZeniMax Media, Inc v. Oculus VR, LLC*, 166 F. Supp.3d 697, 700 (N.D. Tex. 2015).

³² *See id.* (indicating a commercially viable headset had not been attainable due to a latency effect).

³³ Calvin Koh, *Sports in Asia Could Spark Global VR Breakthrough*, NIKKEI ASIAN REVIEW (Apr. 27, 2017), <http://asia.nikkei.com/magazine/20170427/Viewpoints/Calvin-Koh-Sports-in-Asia-could-spark-global-VR-breakthrough?page=2>.

³⁴ Dickson, *supra* note 20.

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.*

The viewership of the game goes beyond traditional broadcasting to diminish external stimulation, resulting in viewers feeling more involved.³⁹ However, current problems with resolution make parts of the game appear more like a videogame.⁴⁰ The blurriness then makes it difficult to watch a full basketball game with the current state of technology.⁴¹

VR is also beginning to address the social aspects of attending a sporting event.⁴² The solitary nature of putting on VR goggles to watch games takes away from the traditional camaraderie of fans watching a game together.⁴³ VR developers are trying to address these problems in several different ways,⁴⁴ including by representing the viewer as an avatar who can interact with other avatars in the stadium or by streaming the perspective of other fans on social sites.⁴⁵ The social aspect can create an interlay over the rendered broadcast of the game by allowing for avatars, chatting, and other features to make the VR environment a more compelling option for viewers.⁴⁶ VR already includes augmented and mixed reality to add more to the experience beyond mimicking game attendance.⁴⁷

I. IS VIRTUAL REALITY COPYRIGHTABLE?

A. *Original Expression*

1. Modicum of Creativity

Originality, a fundamental aspect of copyright, can be shown if the work shows a modicum of creativity,⁴⁸ although this showing merely requires the work contain a creative spark.⁴⁹ Protection through copyright requires a much lower standard of novelty or uniqueness than patent protection.⁵⁰ Most works pass this threshold

³⁹ Rellosa, *supra* note 4.

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² Dickson, *supra* note 20.

⁴³ Rellosa, *supra* note 4.

⁴⁴ Dickson, *supra* note 20.

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co. Inc.*, 499 U.S. 340, 341 (1991).

⁴⁹ *Id.* at 345.

⁵⁰ *Id.*

even when the creative element of the work is “crude, humble, or obvious.”⁵¹ Copyright has a low bar for originality where one can receive copyright for even a compilation of facts, but with a compilation the copyright extends only to that which is original to the author.⁵² Despite this, the creative element is not influenced by the amount of effort the author puts in to producing the work.⁵³ The lack of an effort requirement in creating the original work also allows for the progression of ideas.⁵⁴

The broadcasting of VR live events raises copyrightability issues in the underlying broadcast. Currently, the camera angle allows a virtual spectator to sit courtside with limited mobility.⁵⁵ With time, however, a viewer’s ability to move around the court and experience the live events from an infinite number of angles could influence whether a copyright is still attainable. Creating a VR space where one can view the live event from any position creates uncertainty regarding whether these works pass the modicum of creativity threshold. The outlets for potential creativity decline until the only creativity in the final product is deciding the scope of viewer movement. Such decisions reflect the cost prohibitive nature of filling an entire space rather than any creative choice on the part of the broadcaster. The broadcasts then simply show the facts of the game, but facts do not constitute copyrightable subject matter.⁵⁶ Broadcasting companies would need to introduce creative choice into the VR broadcast medium, potentially through the deliberate restriction of viewer mobility or overlays on the live event.

2. The Authorship Requirement

Congress amended § 101 of the Copyright Act to expressly include protection of these telecasts⁵⁷ as original works of

⁵¹ *Id.*

⁵² *Id.* at 341.

⁵³ 18 AM. JUR. 2D *Copyright and Literary Property* § 24 (2017).

⁵⁴ *See Feist*, 499 U.S. at 359 (“The 1909 Act did not require...that each subsequent compiler must start from scratch and is precluded from relying on research undertaken by another”).

⁵⁵ Gregory, *supra* note 2.

⁵⁶ *Feist*, 499 U.S. at 344.

⁵⁷ *Balt. Orioles, Inc. v. Major League Baseball Players Ass’n*, 805 F.2d 663, 668 (7th Cir. 1986).

authorship.⁵⁸ The broadcast of a live athletic event fulfills the requirements for authorship because the broadcaster makes decisions about “camera angles, types of shots, the use of instant replays and split screens, and shot selection.”⁵⁹ These decisions serve as creative choices made by the author to fulfill copyright requirements.

Although the Copyright Act explicitly protects live broadcasts of sports events,⁶⁰ protection does not apply to the underlying event itself.⁶¹ There has been a longstanding perception that live events are not copyrightable in general.⁶² The Copyright Act includes an illustrative list of works that can be works of authorship which does not include sports games.⁶³ Sports games are not only not listed, but also do not seem similar enough to any of the listed works in the statute to qualify.⁶⁴ The focus of the athletic events depend as much upon the uncertain and unplanned aspects of the game to drive performance as the massive amount of preparation by players.⁶⁵ Likewise, set plays in an athletic event should not receive copyright protection, since any protection would limit the progress of any sport by impeding the number of possible plays.⁶⁶ The combination of unplanned aspects of the game and set plays by athletic teams supports the view that the underlying sports games should not be considered works of authorship under the Copyright Act.⁶⁷

In sports broadcasts, directors make many creative decisions by deciding which images and clips to play.⁶⁸ These broadcasts, which are the compilation of those creative decisions, qualify as copyrightable expression separate from the non-copyrightable

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ See 17 U.S.C. § 101 (2012).

⁶¹ *The Nat'l Basketball Ass'n v. Motorola, Inc.*, 105 F.3d 841, 845 (2d Cir. 1997).

⁶² *Id.*

⁶³ See 17 USC § 102(a) (including a list of categories of Works of authorship without listing sports games).

⁶⁴ *Motorola*, 105 F.3d at 846.

⁶⁵ See *id.* (“Athletic events may also result in wholly unanticipated occurrences”).

⁶⁶ See *id.*

⁶⁷ Melville B. Nimmer & David Nimmer, *Nimmer on Copyright* § 2.09[F] at 2-170.1 (1996).

⁶⁸ *Motorola*, 105 F.3d at 847.

expression of the underlying game.⁶⁹ These director distinctive choices separate the broadcast from the underlying facts of the game that anyone attending the game could relay without needing the broadcast.⁷⁰ Then players' performances in a sports game potentially have a creative component. However, the copyrightability of such performance has hinged on the angles from which the cameraman provided the telecast as opposed to the underlying performance.⁷¹

A common understanding that underlying athletic events are not copyrightable could explain the lack of cases addressing the issue.⁷² Congress views the selection of which images to send to the public as the basis of the authorship of a live broadcast.⁷³ Courts have determined a video game constitutes a work of authorship, not due to isolated images of the games played, but rather as a result of the total sequence of images that can be displayed as part of the game.⁷⁴ The audiovisuals of online games can be protected by copyright through plainly discernable modifications and new elements added to the preexisting manifestations of games.⁷⁵

In the VR context, the director no longer makes creative decisions as he merely transmits the game from all angles. By broadcasting every perceivable viewpoint in the stadium, any attempts to claim authorship of the unedited transmission would essentially be copyrighting the underlying game. When broadcasting a live 360-degree event, the decisions on what to focus on are made by the viewer or the underlying progression of the game, which limits the ability of the broadcaster to claim authorship.

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ See *Balt Orioles, Inc. v. Major League Baseball Players Ass'n*, 805 F.2d 663, 669 Fn. 7 (7th Cir. 1986) (holding that "even if the players' performances were not sufficiently creative, the players agree that the cameramen and director contribute creative labor to the telecasts").

⁷² *Motorola*, 105 F.3d at 847.

⁷³ See H.R. REP. NO. 94-1476, at 52 (1976), as reprinted in 1976 U.S.C.C.A.N. 5659, 5665 ("When a football game is being covered by four television cameras, with a director guiding the activities of the four 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'").

⁷⁴ 18 AM. JUR. 2D *Copyright and Literary Property* § 58 (2017).

⁷⁵ *Id.*

In contrast, in VR motion pictures, the director draws the viewer's focus into certain storylines, which allows the director to claim ownership. In this way, the likelihood the broadcaster will receive protection as the author of the work is low unless the broadcaster includes overlays, additional information or restrictions instead of simply moving through the captured content.

The broadcaster's own expression becomes limited or nonexistent when VR allows rendering of the venue from all angles. By allowing a spectator to view the game through every angle possible, the VR broadcast essentially become the facts of the game and would not satisfy authorship or originality requirements. As the technology advances to the point where the cinematographer and cameramen can allow a viewer to broadcast every angle of the live event to a spectator, it would be advantageous for broadcasters to limit such capabilities by encouraging viewers to experience the game from a particular perspective. This could allow for the broadcast to more easily pass the thresholds of original expression. Otherwise free movement too closely approximates attending the game in person, rendering the VR broadcast nearly identical to the underlying game and not copyrightable. When even the fans contribute to the work as a joint copyright owner,⁷⁶ the protection and rights available to each party is unclear. Such complications can be addressed through usage agreements.⁷⁷ Otherwise, the viewer would debatably be creating a new copyrighted work or serving as a joint author when taping his or her individual view of the game and choosing precisely which shots to include.

3. Fixation

The Copyright Act requires an original work of authorship be "fixed in a tangible medium of expression."⁷⁸ The fixation requirement was amended specifically to address the status of live broadcasts, including sports broadcasts, that reach "the public in unfixed form but that are simultaneously being recorded."⁷⁹ A work

⁷⁶ See *Kid Stuff Mktg. Inc. v. Creative Consumer Concepts, Inc.*, 2016 WL 7336406, 4 (D. Kan. 2016) (showing that "under appropriate circumstances, a contributor of ideas may qualify as a joint author").

⁷⁷ *Infra* Section IV.

⁷⁸ 17 U.S.C. § 101 (2012).

⁷⁹ H.R. REP. NO. 94-1476, at 52 (1976), *as reprinted in* 1976 U.S.C.C.A.N. 5659, 5665.

is fixed when it is “sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.”⁸⁰ The fixation requirement includes broad protection for future development of tangible mediums of expression.⁸¹ The work is fixed if it occurs by or under the authority of an author.⁸² Video games have been found to be fixed because the “images generated or created by the video game each time it is played are identical or substantially identical to the earlier ones.”⁸³ Simultaneously recorded live broadcasts are also fixed because they are videotaped and brought into tangible form at the same time as the broadcast is sent out to the public.⁸⁴ The fixation of the copyrighted work need only exist for longer than a transitory duration.⁸⁵

As with video game play, the transmission of a VR broadcast of a live event should be considered fixed even though the individual viewer can experience the event in a way that is not exactly replicable. This work of authorship could entitle the broadcast of VR versions of live performances to copyright protection even though each viewer experiences a slightly different set of images. Furthermore, copyright protection applies more easily to the use of VR at live events when the producer includes certain discernable modifications, like additional statistics or information about the event. These arrangements would provide additional information beyond the underlying game that creates copyrightable expression of an otherwise unprotected idea replicable in a fixed form.

B. Idea-Expression Distinction

Although copyright only requires a minimum level of creativity, it does not protect ideas, concepts, or processes, and is

⁸⁰ 18 AM. JUR. 2D *Copyright and Literary Property* § 28 (2017).

⁸¹ *See id.* (“fixed in any tangible medium of expression, now known or later developed, from which it can be perceived, reproduced, or otherwise communicated...”).

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ *MAI Systems Corp. v. Peak Comput., Inc.*, 991 F.2d 511, 517–518 (9th Cir. 1993).

limited to the form of expression.⁸⁶ This distinction between ideas and expression allows authors to build on the ideas of others.⁸⁷ In copyright law, the merger doctrine denies protection when idea embodied in the work blocks any other forms of expression from protection.⁸⁸ When the audio-visual work allows presentation of different portions of its subject or depicts its subject from a specific vantage point, the merger doctrine does not apply because other means exist to portray the underlying idea even when the way of expressing the ideas is the most obvious manner to do so.⁸⁹ Because ideas are not entitled to copyright protection, works in which the expression does not differ from the underlying facts contained therein cannot be copyrighted.⁹⁰ The underlying fact cannot be protected by copyright in any way that prevents another person from presenting the same fact.⁹¹ The copyrightability of a work becomes further suspect when the author does not provide additional commentary.⁹² Just because a format is original does not make the underlying facts covered by copyright.⁹³

When a VR broadcast allows free range views of an event without any overlays, the broadcast could lack protection due to the idea-expression dichotomy. The choices of the broadcast in such a situation do not include sufficient expressive choices. Although VR broadcasting would constitute an original format, the expression would seem to cover any choices of perspective in the game and could foreclose on some of the ability to present the information in another manner. Provided the VR broadcast itself would not receive copyright protection, then broadcasters must find ways to protect their labor from viewers who show creativity by recording the individual experience through the game with commentary. The VR broadcaster should then find other means to protect the content.

⁸⁶ *Fortgang v. Pereiras Architects Ubiquitous LLC*, 230 F.Supp.3d 77, 84 (E.D.N.Y. 2017).

⁸⁷ *Id.* at 84.

⁸⁸ *Kid Stuff Mktg. Inc. v. Creative Consumer Concepts, Inc.*, 2016 WL 7336406, 14 (D. Kansas 2016).

⁸⁹ *Id.*

⁹⁰ *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co. Inc.*, 499 U.S. 340, 341 (1991).

⁹¹ *Id.* at 346.

⁹² *Id.* at 347.

⁹³ *Id.*

II. POTENTIAL DEFENSES AGAINST COPYRIGHT INFRINGEMENT BY A USER OF VIRTUAL REALITY

A. *Derivative Works*

When a broadcaster has met the requirements of originality and fixation, even if the viewer controls movement, the final product remains copyrightable by the broadcaster as a derivative work. Part of the rights of copyright holders hold against infringers is the right to prepare derivative works.⁹⁴ This right then protect VR broadcasters from viewers who record individual experiences and attempt to obtain copyright protection under the guise of a unique perspective or additional commentary.

B. *Digital Millennium Copyright Act*

As VR technology advances, producers will additionally want to defend their broadcasts with protections included in the Digital Millennium Copyright Act (DMCA)⁹⁵. In giving the viewers a license to view the events, the broadcaster's rights can be protected by developing the technology in a way that prevents viewers from being able to record the event from their perspective in the VR setting. The DMCA creates protections distinct from those traditionally given through copyright.⁹⁶ Two sources of protection in the act include the ability to (1) prevent circumvention by using a technological measure that effectively controls access to a copyrighted work⁹⁷ and (2) prevent the distribution of circumvention tools.⁹⁸

When creating anti-circumvention methods to ensure that viewers cannot violate the rights of broadcasters during a live event, broadcasters should include technological measures that comply with both §§ 1201(a)(1)(A) and 1201(a)(2) of the DMCA.⁹⁹ Because the DMCA enumerates two distinct types of claims,¹⁰⁰ copyright holders should develop the VR technology in a way that allows for broadcasters to viably assert protection under both claims. These

⁹⁴ 17 U.S.C. § 101 (2012).

⁹⁵ 17 U.S.C. § 1201 (2012).

⁹⁶ MDY Indus., LLC v. Blizzard Entm't, 629 F.3d 928, 950 (9th Cir. 2010).

⁹⁷ 17 U.S.C. § 1201(a)(1)(A) (2012).

⁹⁸ 17 U.S.C. § 1201(a)(2) (2012).

⁹⁹ *Id.* at 942.

¹⁰⁰ *Id.* at 944.

measures should protect the copyright itself in addition to protecting against accessing the work.¹⁰¹ There is a circuit split where some courts require a nexus to copyright, while others, such as the Ninth Circuit, do not impose such a requirement.¹⁰² Even with a nexus requirement,¹⁰³ any protections added to a VR broadcast would qualify under the DMCA. The use of §§ 1201(a)(1) and 1201(b)(1) are especially worthwhile to implement to protect the rights of the copyright owners when there is no nexus requirement.¹⁰⁴

When designing the anti-circumvention measures, the control measure should effectively control all access and should not protect one part of the technology while leaving other circumvention means open.¹⁰⁵ To ensure that § 1201(b)(1) protection applies, broadcasters should make sure the live event is only broadcast through a stream that protects a right under the Copyright Act to ensure that the DMCA protection applies to protections that fall under license covenants.¹⁰⁶ Any protection should make sure to cover the VR equivalent of screen shots¹⁰⁷ and find ways to prevent the copying of the display onto other formats.

III. OTHER POTENTIAL MEANS TO PROTECT THE DEPICTIONS OF LIVE EVENTS IN VIRTUAL REALITY

When for-profit radio stations first began transmitting the narrative of live events, they made misappropriation claims against competitors who listened to a live broadcast and relayed the

¹⁰¹ See *id.* at 944 (indicating the measures “protect ‘a right of a copyright measure’”).

¹⁰² See *id.* at 950 (discussing the decision in *Chamberlain* and how the *Blizzard* Court decided to take a different approach).

¹⁰³ *Chamberlain Grp., Inc. v. Skylink Techs., Inc.*, 381 F.3d 1178, 1203 (Fed. Cir. 2010).

¹⁰⁴ See *Blizzard*, 629 F.3d at 951 (declining to address antitrust considerations; therefore such considerations should be kept in mind while designing the measures to be used with virtual reality consoles).

¹⁰⁵ *Lexmark Int’l, Inc., v. Static Control Components, Inc.*, 387 F.3d 522, 546–547 (6th Cir. 2004) (explaining that having an authentication process does not mean the technology adequately controls access for DMCA protection).

¹⁰⁶ See *Blizzard*, 629 F.3d at 954 (stating that violating a covenant under a license does not necessarily mean violating copyright, and if there is no copyright violation DMCA protection does not apply).

¹⁰⁷ See *id.* at 955.

information on to their listeners.¹⁰⁸ These claims imposed restraints on the transmission of an event by one party to another party.¹⁰⁹ A misappropriation claim can be preempted by the Copyright Act when the alleged infraction violates (1) one of the rights in copyright holder's bundle of rights and (2) the subject matter falls within the types of works protected under §§ 102 and 103 of the Copyright Act.¹¹⁰ Although copyrightable material often contains uncopyrightable elements, separate misappropriation claims cannot be brought for the uncopyrightable elements of the copyrighted work through a partial preemption right.¹¹¹ Misappropriation survives preemption when the state-created cause of action requires an extra element beyond the scope of copyright.¹¹² To ensure that the extra element test continues to promote narrow construction of a claim, this test should not allow claims to easily survive preemption.¹¹³ Although misappropriation can apply to live sports without being preempted by the Copyright Act, the limited use of such a claim¹¹⁴ makes it unlikely to serve as an alternate to copyright protection for VR.

The elements of a “hot news” misappropriation claim require that:

“(i) a plaintiff generates or gathers information at a cost; (ii) the information is time-sensitive; (iii) a defendant’s use of the information constitutes free riding on the plaintiff’s efforts; (iv) the defendant is in direct competition with a product or service offered by the plaintiff’s efforts; and (v) the ability of other parties to free-ride on the efforts of the plaintiff or others would so reduce the incentive to produce the product or service that its existence or quality would be substantially threatened.”¹¹⁵

Misappropriation emerged as a broad and flexible doctrine to protect from practices that are offensive to the ethics of society.¹¹⁶ Case law

¹⁰⁸ Nat’l Basketball Ass’n v. Motorola, Inc., 105 F.3d 841, 845 (2d Cir. 1997).

¹⁰⁹ *Id.*

¹¹⁰ *Id.* at 848.

¹¹¹ *Id.* at 848–49.

¹¹² *Id.* at 850; Computer Assoc. Int’l Inc., v. Altai, Inc., 982 F.2d 693, 716 (2d Cir. 1992).

¹¹³ *Motorola*, 105 F.3d at 851.

¹¹⁴ *Id.* at 845.

¹¹⁵ *Id.*

¹¹⁶ *Id.* at 851.

on simultaneously recorded broadcasts prior to the implementation of the Copyright Act provides a framework for analysis of misappropriation.¹¹⁷

VR broadcasters of live events generate information at a large cost. When the technology develops to allow 360-degree rendering, broadcasts will likely remain quite costly as the possible movement range increases. Live games are time-sensitive, and any delay induces the viewer to use other sources. However, when a viewer records her individual perspective of the game and infringes on the copyright, the time sensitivity of the work decreases. Videos by viewers, however, could constitute free-riding. The directness of any competition would be difficult to ascertain without specific examples of infringement. Viewer videos might be unlikely to reduce the incentive of the VR broadcasters to make the product.

Right of publicity claims ultimately fail the preemption test when sports broadcasting footage is used in other works even though the performances in football games themselves are not copyrightable.¹¹⁸ The live broadcasts of such works are in the purview of the Copyright Act, and footage from live broadcasts adapted into other formats does not survive preemption.¹¹⁹ According to Nimmer, right to publicity claims in actions involving sporting events should be limited to instances where there is misappropriation for the purposes of trade in the Restatement (Third) of Unfair Competition.¹²⁰ Such purposes would “not ordinarily include the use of a person’s identity in news reporting, commentary, entertainment, works of fiction or nonfiction, or in advertising that is incidental to such uses.”¹²¹ Copyright law does not preempt claims brought on the basis of contract law, as those claims are not equivalent to the exclusive rights of copyright and therefore serve as a means to protect the rights of the copyright owner.¹²² Contract law is not preempted because copyright serves as

¹¹⁷ *See id.* at 852.

¹¹⁸ *Maloney v. T3Media, Inc.*, 94 F. Supp.3d 1128, 1137 (C.D. Cal. 2015); *Dryer v. Nat’l Football League*, 814 F.3d 938, 941–942 (8th Cir. 2016).

¹¹⁹ *Dryer*, *supra* note 118 at 942.

¹²⁰ Nimmer, *supra* note 67 at §1.01[B][3][b][iv].

¹²¹ RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 47 (AM. LAW INST. 1995).

¹²² *MDY Industries, LLC v. Blizzard Entertainment*, 629 F.3d 928, 957 (9th Cir. 2010); *see infra* Section IV.

a protection against the rest of the world, while contracts are generally only enforceable between parties.¹²³

As VR technology advances, it may end up serving as a substitute for attending the actual games, which could infringe upon the rights of the sports leagues for which it is broadcasting.¹²⁴ Misappropriation claims could to protect those rights, but issues with preemption make other means of legal protection more reliable.

IV. MOVEMENT TO COVENANTS AND CONTRACTUAL OBLIGATIONS AND HOW FAR SUCH PROTECTION CAN STRETCH

Recordings of viewer movement during live VR broadcasts can be regulated by an end user license agreement. These agreements could include content license provisions requiring that the viewer only use a single copy of the image for non-commercial use and to acknowledge not holding any rights in the likenesses of the athletes or performers broadcasted in the live event through the transmission or viewing of the broadcast.¹²⁵ To clarify that the broadcast is licensed to the viewer, specific indicators should exist. Additionally, there should be restrictions in the user's ability to record the broadcast, and notable use restrictions should be imposed.¹²⁶

When the viewer watches a live event through VR and records her movement through the game, the broadcasters of the content could protect rights by including content license agreements. The rights of broadcasters of the VR sports events can also be protected by imposing use restrictions,¹²⁷ such as only allowing one viewer per subscription per use and not allowing the viewpoint of the person wearing the equipment to be projected onto a larger screen. The DMCA protections should run concurrently

¹²³ *Blizzard*, 629 F.3d at 957.

¹²⁴ *See Nat'l Basketball Ass'n v. Motorola, Inc.*, 105 F.3d 841, 854 (2d Cir. 1997) (explaining that SportsTrax did not implicate misappropriation because it was designed for time where a viewer could not "be at the arena, watch the game on TV, or listen to the radio...").

¹²⁵ *Maloney v. T3Media, Inc.*, 94 F. Supp.3d 1128, 1134 FN1 (C.D. Cal. 2015).

¹²⁶ *Blizzard*, 629 F.3d at 938.

¹²⁷ *Id.*

with restrictions that prevent concurrent use with unauthorized third-party programs.¹²⁸

A copyright holder waives the right to sue licensees under copyright by granting a non-exclusive, limited license.¹²⁹ Despite this, the licensee still can sue under copyright and breach of contract when acting outside of the scope of the license.¹³⁰ Any nonexclusive, limited license granted by a copyright owner includes (1) covenants, which are actionable only through contract law, and (2) conditions, which are actionable through copyright law.¹³¹ To bring a copyright-based claim when a condition is breached, the complaint must emerge from the violation of an exclusive right of a copyright owner,¹³² which are the rights of “reproduction, distribution, public performance, public display, and creation of derivative works.”¹³³

Broadcasters should use non-exclusive, limited licenses as the primary means to control VR live broadcasts. The uncertainty of VR live sports copyrightability makes the licenses the best protection of a work, despite the risk of governing viewer use in this manner. Furthermore, these copyright-enforceable conditions should be unambiguous. Any ambiguity could make a court interpret it as a covenant, which is only actionable under contract law.¹³⁴ The flexibility of contract law gives the broadcasters methods to protect their rights both under and outside of copyright law through licenses. Licenses with restrictions of use are an important precautionary measure for broadcasters to ensure a remedy to enforce their rights in the labor.

CONCLUSION

Virtual reality has taken great strides recently and continues to advance in ways that suggest the technology will soon allow a live broadcast viewer to very closely approximate actual attendance of a game. Developments in the freedom of movement, as well as in scent and touch technology, will enhance the viewer experience. But

¹²⁸ *See id.* at 939.

¹²⁹ *Id.*

¹³⁰ *Id.*

¹³¹ *Id.*

¹³² *Id.* at 940.

¹³³ 17 U.S.C. § 106 (2012).

¹³⁴ *Blizzard*, 629 F.3d at 940.

as the technology advances and as the broadcasts more closely resemble the underlying games, novel copyright protection issues will inevitably arise. The uncertainty of whether a VR broadcast would have the requisite elements of creativity, authorship, and fixation to receive copyright protection makes it so broadcasters should pursue other forms of protection for each work. In case copyright protection is found, the broadcaster should put in place anti-circumvention measures to protect the work under the DMCA. In the event that securing copyright protection fails, the broadcaster could try and bring a misappropriation claim against those who further relay the information gathered through the broadcast of the game, but, despite the flexibility of this doctrine, it is likely not the best way to protect a work. To further protect the work even if copyright protection fails, the broadcaster should include covenants and contractual obligations in the end user agreements. The combination of these protections will guard the rights of a broadcaster disseminating VR coverage of live sports game.