COMMENT

HITTING RESET: DEVISING A NEW VIDEO GAME COPYRIGHT REGIME

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INTRODUCTION

Video games, like other works of creative and artistic expression, are eligible for protection under U.S. copyright law.[1] However, current applications of copyright law to video games provide only thin barriers to copying, permitting competitors to mimic, or "clone," the fundamental mechanics, design, and often story elements of a game in order to release a competing product. The scant protection afforded to video games applies equally to other game genres, such as board games, and is rooted in the copyright principle that only elements of original expression may be protected, while ideas—such as game rules and mechanics—must be allowed to propagate freely.[2] Because ideas and expression are uniquely intertwined in games of all kinds, however, courts have struggled to set clear doctrinal lines and strike a balance between protecting novel creations from wholesale copying, while not stifling further game innovation.

In 2012, two district court cases, *Tetris Holding, LLC v. Xio Interactive, Inc.*[3] and *Spry Fox LLC v. LOLApps Inc.*,[4] attempted to revise the copyright regime as it applies to games. In 2014, another district court in *DaVinci Editrice S.R.L. v. ZiKo Games, LLC* consolidated these cases and further developed a copyright doctrine that could fundamentally alter how courts treat "cloned" games going forward.[5] Cloning has increased over the past decade, as easier game development for mobile devices like smartphones has enabled some video game developers, who would rather clone existing games than devise original ones, to thrive in the video game industry.[6] As a result, small, independent developers wishing to introduce new game mechanics and other innovations to the mobile gaming space are regularly victimized by game cloners who mimic and essentially steal their games, players, and profits.[7] Meanwhile, consumers, who may not be able

1 *See* 1-2 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 2.18[H][3][b] (2015) ("[O]ne who copies a video game through copying its copyrighted computer program has clearly engaged in copyright infringement. . . . [T]he display of images on a video game screen is itself separately copyrightable as an audiovisual work." (emphasis omitted)).

2 *Id.* § 2.18[H][3][a].

3 863 F. Supp. 2d 394 (D.N.J. 2012).

4 No. 12-00147, 2012 WL 5290158 (W.D. Wash. Sept. 18, 2012).

5 No. 13-3415, 2014 WL 3900139 (S.D. Tex. Aug. 8, 2014).

6 *See* Nicholas M. Lampros, Note, *Leveling Pains: Clone Gaming and the Changing Dynamics of an Industry*, 28 BERKELEY TECH. L.J. 743, 745-46 (2013) ("New distribution models, increased accessibility to the marketplace, and a boom in mobile and social gaming have created a rapidly changing environment that is particularly fertile for clone developers.").

7 *See* Christopher Lunsford, Comment, *Drawing a Line Between Idea and Expression in Videogame Copyright: The Evolution of Substantial Similarity for Videogame Clones*, 18 INTELL. PROP. L. BULL. 87, 90 (2013) ("[Independent] developers often lack legal support since publishers are usually the ones aggressively defending the intellectual property rights of developers."); Giancarlo Valdes, *500 iOS Games Per Day: Flooded Mobile Market Is Tricky for Indie Developers*, VENTUREBEAT (Mar. 3, 2015, 11:00 AM), http://venturebeat.com/2015/03/03/500-ios-games-per-day-flooded-mobile-market-is-tricky-for-indie-devs [https://perma.cc/B7F7-NRMW] ("The staggering numbers [of new mobile apps] underscore

to differentiate between original games and convincing, deceptively titled clones, may fall victim to cloning practices. In short, even as thin copyright encourages innovation in video games and promotes the development of new, original products, cloning discourages innovation and deceives and harms consumers to a greater extent than ever before. Unfortunately, the current video game copyright regime enables this paradoxical state of affairs.

In this Comment, I argue that obtaining and sustaining optimal video game innovation and creativity requires two complementary advancements by the two main actors in the video game copyright space—the U.S. courts and the video game developers themselves. U.S. courts should maintain and build upon recent precedent in the *Tetris Holding*, *Spry Fox*, and *DaVinci* cases and recognize a greater sphere of protectability for game mechanics that is sensitive to copied elements. As I will show, the approaches in *Tetris Holding*, *Spry Fox*, and *DaVinci* strike a functional balance between the competing needs of protecting copyrighted expression and enabling further innovation. The cases also send a signal to clone developers that "cloning" may no longer be shielded from liability.[8] Following these cases, U.S. courts can "rebalance" copyright for video games by revising how the idea–expression dichotomy, the merger doctrine, and the scènes à faire doctrine apply to video games and by expanding the sphere of protectable expression in video games. To that end, independent game developers who create new premises and mechanics should take conscious steps to infuse their software with unique expression to make their works more protectable and fend off clones. Otherwise, they must adopt marketing practices that enable them to more quickly monetize games that will inevitably be cloned. Together, these two sets of changes can foster greater protection for innovative game software and a richer marketplace for consumers, while not overextending the reach of copyright to threaten the iterative innovation that underpins video game development.

In Part I, I present an overview of the video game industry as a whole, with a focus on the increasingly important role mobile gaming plays. In Part II, I discuss the basic elements of copyright doctrine and how case law as applied to video games has evolved over time and shaped the industry. In Part III, I address the potential shifts in case law indicated by the *Tetris Holding*, *Spry Fox*, and *DaVinci* cases. In Part IV, I discuss a recent example of cloning in mobile gaming, and how a modified copyright regime could have led to a

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the difficult situation that independent developers—who don't have the marketing muscle of a major publisher to wade through the digital flood—face when releasing their titles for smartphones."). *See generally* Asher Vollmer & Greg Wohlwend, *The Rip-Offs & Making Our Original Game*, THREES, http://asherv.com/threes/threemails/ [https://perma.cc/NW3L-EYVT].

8 *See Tetris Holding*, 863 F. Supp. 2d at 399 (discussing defendant Xio's ultimately rejected claim that it had "researched copyright law" and determined that *Tetris* had no protectable expression upon which it could infringe).

more preferable outcome. Finally, in Part V, I suggest steps for video game developers to take in game development to better protect themselves.

I. OVERVIEW OF THE VIDEO GAME INDUSTRY

Video games are a significant economic and cultural force today. Launches of new entries in major video game franchises, like the *Call of Duty* line of games from Activision Blizzard, garner widespread media attention and handily exceed the revenue of blockbuster Hollywood film runs.[9] In 2015, video game publishers purchased a recordbreaking number of advertisements during the Super Bowl.[10] An entirely separate industry has developed out of watching *other* people play video games. The website Twitch.tv allows gamers to film themselves playing and stream videos to the site's 50 million unique monthly visitors.[11] In 2014, Amazon edged out Google to purchase Twitch for $970 million.[12] Twitch, in turn, aided the rise of the new phenomenon of competitive gaming or "eSports," in which video game players compete against each other, in front of massive arena crowds and even larger online audiences, for millions of dollars in prize money.[13] Competitive gaming has become so popular, and its star players so sought after, that the United States has begun to offer visas to competitive gamers as "internationally recognized athletes," the same special

9 *See* Tim Worstall, *Call of Duty: Biggest One Day Entertainment Sales Ever*, FORBES (Nov. 12, 2011, 12:59 PM), http://www.forbes.com/sites/timworstall/2011/11/12/call-of-duty-biggest-one-day-entertainment-sales-ever [https://perma.cc/BR3K-BBKU] ("Call of Duty: Modern Warfare 3 has broken all sales records in its first 24 hours of release. Sales of over $400 million in the US and UK alone beats [sic] any entertainment product release anywhere, ever."). In November 2015, the game Fallout 4 earned $750 million within 24 hours of its release. John Gaudiosi, *'Fallout 4' $750 Million Game Leaves 'Call of Duty' in the Dust*, FORTUNE (Nov. 16, 2015, 10:34 AM), http://fortune.com/2015/11/16/fallout4-is-quiet-best-seller [https://perma.cc/FXG6-MKBJ].

10 Kyle Orland, *What Super Bowl Ads Can (and Can't) Tell Us About the Video Game Market*, ARS TECHNICA (Feb. 2, 2015, 12:02 PM), http://arstechnica.com/gaming/2015/02/what-super-bowl-ads-can-and-cant-tell-us-about-the-video-game-market [https://perma.cc/ZET2-Y7K3].

11 Alex Hern, *Twitch: Why Amazon's $1bn Purchase Is All About the Ads*, GUARDIAN (Aug. 26, 2014, 8:57 AM), http://www.theguardian.com/technology/2014/aug/26/amazon-billion-twitch-advertising-games-live-google-youtube [https://perma.cc/9HVY-YJK4].

12 *Id.*

13 *See* Ben Popper, *Field of Streams: How Twitch Made Video Games a Spectator Sport*, VERGE (Sept. 30, 2013, 9:00 AM), http://www.theverge.com/2013/9/30/4719766/twitch-raises-20-million-esports-market-booming [https://perma.cc/2PSY-P26H] ("After decades spent on the fringes, professional video gaming, know[n] as eSports, is suddenly the industry darling. . . . At the center of this boom in eSports is Twitch, the streaming video service which has become the platform for every major tournament."); Paul Tassi, *League of Legends Finals Sells Out LA's Staples Center in an Hour*, FORBES (Aug. 24, 2013, 9:28 PM), http://www.forbes.com/sites/insertcoin/2013/08/24/league-of-legends-finals-sells-out-las-staples-center-in-an-hour [https://perma.cc/EU3M-EYFE] (discussing the success of Riot Games, creator of the popular eSports title *League of Legends*, in building interest in competitive gaming).

immigrant status accorded to athletes like David Beckham.[14] This widespread cultural embrace of gaming would have been unthinkable only a few years ago.[15]

A. *Mobile Games Industry*

Within the video game industry as a whole, mobile gaming—defined as gaming that takes place on smartphones and tablets[16]—represents an especially "disruptive and dynamic"[17] sector and arguably "the largest and fastest-growing area of interactive entertainment."[18] In addition to serving as cellphones, internet browsers, and music devices, smartphones and tablets that run on Apple iOS and Google Android software function as video game platforms, with instant access to virtual game storefronts through their respective "app" stores.[19]

14 *See* Paresh Dave, *Online Game League of Legends Star Gets U.S. Visa as Pro Athlete*, L.A. TIMES (Aug. 7, 2013), http://articles.latimes.com/2013/aug/07/business/la-fi-online-gamers-20130808 [https://perma.cc/YC7S-M3RX] ("[T]he decision by the U.S. Citizenship and Immigration Services has been widely perceived as elevating America's newest professional sport to the same class as old-school stalwarts.").

15 Of course, this is not to say that video games have only recently made cultural inroads. Iconic games like *Pac-Man*, long-running series such as *Final Fantasy*, and Nintendo's stable of familiar game characters, to name only a few examples, have long exerted an indelible pull on pop culture. *See, e.g.*, *Exhibitions: The Art of Video Games*, SMITHSONIAN AM. ART MUSEUM, http://americanart.si.edu/exhibitions/archive/2012/games [https://perma.cc/NJ9E-CSZD] (addressing the artistic, cultural, and technological contributions of video games including *Pac-Man*, *Super Mario Brothers*, *Final Fantasy VII*, and numerous others); *see also* Christine Champagne, *How "Pac-Man" Changed Games and Culture*, FAST COMPANY (May 22, 2013, 8:00 AM), http://www.fastcocreate.com/1683023/how-pac-man-changed-games-and-culture [https://perma.cc/94MX-48DM] (describing the continuing impact of *Pac-Man* on game design and noting that "*Pac-Man* is so iconic in American culture that it transcends generations with ease"). Recent years have seen the influence of video games grow to significant new heights.

16 Although handheld gaming devices such as the Nintendo Game Boy, Nintendo 3DS, and PlayStation Vita are equally as "mobile" as smartphones, for the purposes of this Comment I exclude them from the term "mobile gaming." Because the Nintendo and PlayStation devices are produced, and their game ecosystems controlled, by some of the major console gaming manufacturers, they have experienced less pronounced problems with cloned games. In defining "mobile gaming" to focus on smartphone and tablet platforms, I am also hewing to convention among the technology and gaming commentariat. *See, e.g.*, Tadhg Kelly, *Is Mobile Gaming the New Core Gaming?*, TECHCRUNCH (Nov. 2, 2014) http://techcrunch.com/2014/11/02/is-mobile-gaming-the-new-core-gaming [https://perma.cc/K5WD-B6CM] (separating "mobile" gaming from "console" gaming).

17 Ievgen Leonov, *Trends and Next Steps for Mobile Games Industry in 2015*, GAMASUTRA (Dec. 30, 2014, 2:04 PM), http://gamasutra.com/blogs/IevgenLeonov/20141230/233356/Trends_and_next_steps_for_mobile_games_industry_in_2015.php [https://perma.cc/ZR2K-RKZ2].

18 Justin Wm. Moyer, *Activision to Buy Maker of 'Candy Crush' for $5.9 Billion*, WASH. POST (Nov. 3, 2015), https://www.washingtonpost.com/news/morning-mix/wp/2015/11/03/activision-to-buy-maker-of-candy-crush-for-5-9-billion [https://perma.cc/8VYY-WTRL].

19 *See* Lampros, *supra* note 6, at 749-50 ("The iTunes App Store and Google Play are the leaders in mobile gaming technology for the iOS and Android operating systems, respectively."). Although iOS and Android operating systems currently dominate the mobile gaming space, software and hardware offerings from Windows and Blackberry, among others, offer similar access to mobile gaming apps. *See, e.g.*, *Apps for Windows Phone*, MICROSOFT, http://www.microsoft.com/en-us/store/

Within the United States alone, an estimated 126 million people now use their smartphones for gaming; by 2016, an estimated 144 million people—eight out of ten smartphone owners—will do so.[20] These adoption rates explain the significant growth in gaming revenue for iOS and Android games.[21] Many mobile game players are flocking to offerings from major mobile developers, such as King Digital Entertainment, the developer of the *Candy Crush* games, which became a public company in 2014 on the back of *Candy Crush*'s success,[22] and Supercell Oy, the creators of *Clash of Clans*.[23] Even the three video games advertised during the 2015 Super Bowl are all exclusively available on mobile platforms.[24] While mobile games such as these are often free to download, they generate much of their revenue through small purchases that users make within the apps, called "microtransactions," which allow users to buy bonuses and advantages once they have already started playing.[25] This is also referred to as the "freemium" business model, a portmanteau of "free" and "premium."[26] The "freemium" model has proven extremely lucrative, catapulting a handful of game developers to multibillion dollar valuations.[27] 2014 marked the first

apps/windows-phone [https://perma.cc/P4KH-7YPU] (last visited Mar. 19, 2016). For simplicity I refer to "the app store" in this Comment when referring to app marketplaces generally.

20 James Rogerson, *Why the Smartphone Is About to Beat the PS4 at Its Own Game*, TECHRADAR (Dec. 25, 2013), http://www.techradar.com/us/news/phone-and-communications/mobile-phones/can-smartphones-be-as-good-for-gaming-as-consoles-1189727 [https://perma.cc/9KR7-D6YF].

21 *See* Ievgen Leonov, *Mobile and Social Gaming Industry: 2014 Highlights*, GAMASUTRA (Dec. 29, 2014, 2:17 PM), http://gamasutra.com/blogs/IevgenLeonov/20141229/233307/Mobile_and_Social_Gaming_Industry_2014_Highlights.php [https://perma.cc/SJP5-42UK] ("[O]ver the year the top mobile platforms have augmented their revenue greatly: in Q2 2014 iOS games generated a 70% higher revenue than they did in Q2 2013, and Android games added 60% on top of their last year's revenues for the same period. Meanwhile, [the] console gaming segment suffered a 28% decline in revenue.").

22 Maggie McGrath, *Candy Crush Maker King Digital Prices IPO at $22.50 per Share*, FORBES (Mar. 25, 2014, 7:24 PM), http://www.forbes.com/sites/maggiemcgrath/2014/03/25/candy-crush-maker-prices-ipo-at-22-50-per-share [https://perma.cc/T89L-FUSF].

23 *Clash of Clans*, *SUPERCELL*, http://supercell.com/en/games/clashofclans [https://perma.cc/3V47-7WSY].

24 *See* Lauren Johnson, *Why So Many Mobile Games in the Super Bowl? Because TV Is a Gold Mine for Them*, ADWEEK (Feb. 3, 2015, 8:00 AM), http://www.adweek.com/news/technology/why-mobile-games-are-newest-super-bowl-brands-watch-162741 [https://perma.cc/H7HT-WD8X] ("Three mobile games—Game of War, Heroes Charge and Clash of Clans—ran in-game ads during this weekend's Super Bowl broadcast . . . .").

25 Lampros, *supra* note 6, at 754; *see also* Bo Moore, *Super Bowl Ads for Mobile Games (Probably) Paid Off Big*, WIRED (Feb. 6, 2015, 1:17 PM), http://www.wired.com/2015/02/mobile-game-super-bowl-ads [https://perma.cc/VRD2-ZQ2Y] ("Each of these games makes its money through in-app purchases that get users to pay for bonuses after they've started playing . . . ."); Orland, *supra* note 10 (labelling free mobile games as "microtransaction-driven").

26 Barbara Findlay Schenck, *Freemium: Is the Price Right for Your Company?*, ENTREPRENEUR (Feb. 6, 2011), http://www.entrepreneur.com/article/218107 [https://perma.cc/AB99-7JG4].

27 *See* Douglas MacMillan & Telis Demos, *Newest Hit-Game Maker Machine Zone Nears $3 Billion Valuation*, WALL ST. J. (July 16, 2014, 3:07 PM), http://blogs.wsj.com/digits/2014/07/16/newest-hit-game-maker-machine-zone-nears-3-billion-valuation [https://perma.cc/A4MN-ARB3] (noting valuations of $3 billion for Machine Zone, maker of *Game of War: Fire Age*; $3 billion for Supercell, maker of *Clash of Clans*; and $6.4 billion for King Digital Entertainment, maker of *Candy Crush Saga*). In 2015,

time that a mobile game earned $1 billion in revenue, and ultimately three games—*Candy Crush Saga*, *Clash of Clans*, and *Puzzle & Dragons*—passed that impressive threshold.[28]

However, the more intriguing story within the mobile games space is the increasing prominence of independent, or "indie," game developers and their offerings. The term "indie" refers to developers, often individuals or small studios, who self-publish their games rather than going through a major video game publisher like Electronic Arts Inc. (EA) or Activision Blizzard, Inc.[29] As game development becomes easier for mobile platforms, barriers to entry for small prospective video game developers decrease and allow new game ideas and mechanics to enter the marketplace quickly.[30] Mobile game development can be done at lower costs than development on traditional game platforms, namely consoles (e.g., Xbox One, PlayStation 4, and Wii U) and personal computers (PCs).[31]

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one of the most established gaming companies in the world, Activision Blizzard, agreed to purchase King Digital Entertainment for $5.9 billion. *See* Moyer, *supra* note 18.

28 Dale North, *Super Evil Megacorp Boss Looks to Mobile Gaming's History for Lessons on the Industry's Future*, VENTUREBEAT (Feb. 4, 2015, 4:45 PM), http://venturebeat.com/2015/02/04/super-evil-megacorp-boss-looks-to-mobile-gamings-history-for-lessons-on-the-industrys-future [https://perma.cc/JN6J-G3JA].

29 *See* Lunsford, *supra* note 7, at 90 ("An independent game developer, or 'indie' game developer, is a developer who self-publishes his or her own product. The term is loosely defined and usually refers to smaller developers that self-fund their projects." (footnote omitted)).

30 *See id*. at 90 ("In recent years, there has been a surge of activity from indie game developers due to the popularity of mobile devices, accessibility of mobile device markets, and improvements in online marketing."); Press Release, Apple, App Store Rings in 2015 with New Records (Jan. 8, 2015), http://www.apple.com/pr/library/2015/01/08App-Store-Rings-in-2015-with-New-Records.html [https://perma.cc/4Y6A-NFPA] ("Developer innovation on the App Store in 2014 was fueled by iOS 8 featuring Swift, a powerful new programming language that makes it even easier for developers to create great apps . . . .").

31 *See* Rogerson, *supra* note 20. Although perhaps less prominent, consoles and PCs support significant indie development. Microsoft's digital game distribution service Xbox Live Arcade has long hosted indie developers and has even taken steps to allow such developers to self-publish on their platform. Kyle Orland, *Microsoft to Let Indie Developers Self-Publish on Xbox Live Arcade*, ARS TECHNICA (July 25, 2013, 10:55 AM), http://arstechnica.com/gaming/2013/07/report-microsoft-to-finally-let-indie-developers-self-publish-on-xbox-live [https://perma.cc/PL8L-C32Z]. Sony PlayStation provides a similar service. Samit Sarkar, *Sony Introduces New Indie-Oriented PS4 Development Tools*, POLYGON (Mar. 19, 2014, 5:01 PM), http://www.polygon.com/2014/3/19/5526584/sony-ps4-development-tools-indie-gamemaker-studio-monogame-unity [https://perma.cc/Q9MA-72EQ]. PCs, in particular with the advent of Valve's Steam online distribution platform, also provide consumers with a variety of games from established and indie developers. Up until digital distribution let retailers' large releases be accessed online, most of these games were available only in brick-and-mortar stores. The lower risk and cost of developing digital-only games for services like Steam, much like development for mobile platforms, has greatly empowered indie game making. *See* Jonas Sunico, *Valve Opens Up New Developer-Managed Store at Steam*, INT'L BUS. TIMES (Sydney) (Nov. 6, 2015, 11:15 AM), http://www.ibtimes.com.au/valve-opens-new-developer-managed-store-steam-1480945 [https://perma.cc/8UNZ-TGQL]; *see also* John Walker, *RPS Exclusive: Gabe Newell Interview*, ROCK, PAPER, SHOTGUN (Nov. 21, 2007, 3:40 PM), http://www.rockpapershotgun.com/2007/11/21/rps-exclusive-gabe-newell-

Given the low cost of mobile game development and the massive install base of millions of smartphone owners who use their devices for gaming, the "various app stores, particularly Google Play and the Apple App Store, have become flooded with an enormous selection of [mobile game] titles."[32] In March 2016, a staggering 522,690 mobile games were available on the Apple App Store alone, out of a total of 2.27 million apps.[33] In 2014, an average of 500 new mobile game apps were submitted to the Apple App Store *every day*; another 250 were submitted to Google Play.[34] The mean price for a game from the Apple App Store was $0.54,[35] with 76.30% of all games offered for free,[36] and instead using either advertising revenue[37] or a "freemium" business model to generate earnings.[38] This abundance of app riches presents a problem to consumers and indie game developers: How do consumers identify games of merit or quality, and how do developers attract consumers to their games (worthy or not)?

It is difficult to predict which offerings from an indie developer or small studio will garner public notice, much less become a hit game, but occasionally an indie game will capture public attention and rocket to unexpected overnight success.[39] For example, in 2012 the studio OMGPOP released the game *Draw*

interview [https://perma.cc/F29T-PGYE] (describing the reduced risks of digital game distribution compared to releasing games on physical media).

32 Rogerson, *supra* note 20.

33 *App Store Metrics: Summary*, POCKETGAMER.BIZ, http://www.pocketgamer.biz/metrics/app-store [https://perma.cc/VQE2-FDUS] (last visited Mar. 19, 2016). Gaming apps represent the single most populous category of apps on the Apple App Store, followed by Business apps (233,559) and Education apps (209,718). *Id.*

34 *See* Valdes, *supra* note 7.

35 *App Store Metrics: Summary*, *supra* note 33.

36 *App Store Metrics: App Prices*, POCKETGAMER.BIZ, http://www.pocketgamer.biz/metrics/app-store/app-prices [https://perma.cc/M75Y-PZLR] (last visited Mar. 19, 2016).

37 Advertising in mobile games can take many forms. The most common, and least successful, are banner ads that appear to the side of the screen. Increasingly, mobile games are making use of interstitial ads, which appear before, after, or between game sessions or screens, as well as full videos. Mobile games currently drive the majority of mobile advertising revenue. Kamakshi Sivaramakrishnan, *Why Mobile Games Are Shaking Up the Advertising Business*, FORBES (Oct. 16, 2014, 12:18 PM), http://www.forbes.com/sites/groupthink/2014/10/16/why-mobile-games-are-shaking-up-the-advertising-business [https://perma.cc/TY6F-5RN8]; *see also* Eric Berry, *The Truth About Mobile Advertising? It's a House of Cards*, ADWEEK (July 28, 2014, 8:16 PM), http://www.adweek.com/news/advertising-branding/truth-about-mobile-advertising-it-s-house-cards-159121 [https://perma.cc/EF4B-37DT] (discussing the inefficacy of banner ads and major shifts in the mobile advertising ecosystem).

38 *See* Berry, *supra* note 37.

39 *See, e.g.*, Paul Tassi, *Over Sixty 'Flappy Bird' Clones Hit Apple's App Store Every Single Day*, FORBES (Mar. 6, 2014, 10:15 AM), http://www.forbes.com/sites/insertcoin/2014/03/06/over-sixty-flappy-bird-clones-hit-apples-app-store-every-single-day [https://perma.cc/8UQR-RLMG] (discussing "how insane the app store is in terms of what randomly shoots up to the top of the charts").

Something, essentially a version of the game Pictionary for smartphones.[40] The game caught on and attracted millions of users.[41] A few months later the large studio Zynga Inc. purchased OMGPOP and all of its intellectual property for a staggering $200 million.[42] A more recent success story is *Flappy Bird*, which in early 2014 became an unlikely hit that was downloaded over 50 million times.[43] The game earned its solo developer, Dong Nguyen, an estimated $50,000 per day just from in-game advertising revenue.[44] The unexpected popularity and media attention—as well as harsh commentary from some gamers and game critics—ultimately led Nguyen to remove the game from the App Store.[45]

Indie developers like OMGPOP and Dong Nguyen, among many others, have shown that success is possible for a small studio. Yet the far more common outcome is that original indie games, whose developers cannot afford to market their offerings extensively, get lost in the mix of available games.[46] While 2% of indie game developers made over $200,000 in game sales alone in 2013, 57% of indie developers made under $500 on such sales.[47] Mobile game sales are described as having a "long tail," meaning that only a select few apps receive significant attention and purchases (the "head"), while the vast majority of offerings languish in relative or complete obscurity behind it (the "tail").[48] Industry commentators also use the term "zombie app" to refer to those offerings on the various app stores that appear outside of top lists, making them much more difficult for consumers to discover organically.[49] As of January

40 Paul Tassi, *Draw Something Loses 5m Users a Month After Zynga Purchase*, FORBES (May 4, 2012, 9:23 AM), http://www.forbes.com/sites/insertcoin/2012/05/04/draw-something-loses-5m-users-a-month-after-zynga-purchase [https://perma.cc/3CE7-MM7R].

41 *Id*.

42 *Id*.

43 Ellis Hamburger, *Indie Smash Hit 'Flappy Bird' Racks Up $50k per Day in Ad Revenue*, VERGE (Feb. 5, 2014, 6:16 PM), http://www.theverge.com/2014/2/5/5383708/flappy-bird-revenue-50-k-per-day-dong-nguyen-interview [https://perma.cc/WNG6-Z9YX].

44 *Id*.

45 Paul Tassi, *'Flappy Bird' Creator Follows Through, Game Removed from App Stores*, FORBES (Feb. 9, 2014, 1:42 PM), http://www.forbes.com/sites/insertcoin/2014/02/09/flappy-bird-creator-follows-through-game-removed-from-app-stores [https://perma.cc/5HNB-8YZM].

46 *See* Valdes, *supra* note 7 ("You can probably count the number of giant successes on mobile [game platforms] on two hands just from [2014]." (quoting Mark Rose, a talent recruiter for a mobile game developer)); *see also id.* ("[T]he low-end of the scale [for game sales] comes from developers who had little to no marketing . . . .").

47 *Transitions: Gamasutra Salary Survey 2014*, GAMASUTRA 6 (2014), http://www.gamasutra.com/salarysurvey2014.pdf [htpp://perma.cc/WP5Z-MUBJ].

48 David Edery, *The Long Tail of Digital Games*, SPREADABLE MEDIA, http://spreadablemedia.org/essays/edery [https://perma.cc/T4B7-LSXD].

49 *See* Sarah Perez, *"Zombie" Apps on the Rise—83% of Apps Not on Top Lists, Up from 74% Last Year*, TECHCRUNCH (Jan. 30, 2015), http://techcrunch.com/2015/01/30/zombie-apps-on-the-rise-83-of-apps-not-on-top-lists-up-from-74-last-year [https://perma.cc/8RYJ-ZTG4] ("[In the Apple App Store,] an app is *not* considered a 'zombie' if it appears two out of three days in the top 300 lists on the App Store. Being ranked makes an app organically discoverable by end users who browse these

2015, 83% of the then 1.42 million apps on the Apple App Store were considered "zombies" and therefore unlikely to be discovered by consumers.[50] The problem is pronounced in the Games category, where 80% of mobile games for Apple are "zombies."[51] The structure of the app ecosystem therefore rewards game developers who clone gameplay, graphics, premises, or titles of already popular games in order to appear in search results for those apps or siphon away users by offering a familiar experience;[52] it does not reliably reward developers who break the mold and try something new. The current structure of app stores, which the copyright regime enables and abets, arguably dilutes the creativity and ingenuity of game development.[53]

Although games from the big mobile game developers (with big marketing departments) continue to dominate the field in terms of revenue, indie developers have begun to make serious cultural and financial inroads. For example, in a press release declaring another year of record sales on its App Store in 2014, Apple made particular mention of indie developers' contributions, noting that "an especially inspired segment [of App Store development] is the newest generation of independent game creators."[54] Indicating the extent to which mobile games have entered the cultural zeitgeist, an entire subplot in season 3 of Netflix's hit show *House of Cards* centers on main character Frank Underwood's interest in the real-life indie mobile game *Monument Valley*.[55] This increase in cultural salience has resulted in a mobile video gaming boom that will likely also see the mobile gaming sector surpass the console and computer game sectors of the video game industry in revenue.[56]

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category lists. . . . When in a zombie state, however, apps can only be discovered by searching for a specific type of app, or by searching for the app's name directly.").

50 *Id*.

51 *Id*.

52 *See* Simon Parkin, *Clone Wars: Is Plagiarism Killing Creativity in the Games Industry?*, GUARDIAN (Dec. 23, 2011, 6:00 AM), http://www.guardian.co.uk/technology/gamesblog/2011/dec/21/clone-wars-games-industry-plagiarism [https://perma.cc/78fy-tjl3] ("[F]ollowing the rise of the App Store where, thanks to low costs and shorter development periods, studios can be far more responsive to popular trends, claims of game plagiarism are becoming more commonplace . . . .").

53 *See id*. (quoting a game developer who describes the plagiarism of his game as "stifl[ing my] ability [to] be creative").

54 *See* Press Release, Apple, *supra* note 30. Although not explicitly mentioned, the press release likely refers to games such as *Threes!* and *Monument Valley*, which Apple honored with iPhone and iPad game of the year awards in 2014. *See* Brian Crecente, *Apple Names Threes!, Monument Valley Games of the Year*, POLYGON (Dec. 8, 2014, 8:32 AM), http://www.polygon.com/2014/12/8/7352553/apple-names-threes-monument-valley-games-of-the-year [https://perma.cc/SH7R-HQJN].

55 *House of Cards: Chapter 31* (Netflix Feb. 27, 2015); *see also* Salvador Rodriguez, *'Monument Valley' Became Smash Hit After 'House of Cards' Boost from Frank Underwood*, INT'L BUS. TIMES (New York) (Mar. 6, 2015, 12:38 PM), http://www.ibtimes.com/monument-valley-became-smash-hit-after-house-cards-boost-frank-underwood-1838318 [https://perma.cc/4L2X-7VHM].

56 Leonov, *supra* note 21.

B. *Cloning in the Mobile Gaming Space*

While activity within the mobile games space is prolific and exceedingly profitable for some of its developers, not all new games, and certainly not all successful games, are entirely unique or necessarily creative in their own right. The opposite is closer to the truth: the video game industry is rife with the copying, recycling, and redevelopment of other developers' ideas.[57] "The mushrooming popularity of electronic video games has produced a type of game that is . . . [in part,] the subject of frequent imitation."[58] To a great extent such copying is both healthy and essential: the wide variety of games available today is due to the fact that new developers have innovated and "riffed off" of the storylines, game mechanics, and design elements of earlier video games.[59] If a game developer could claim ownership of too much of his or her creation, that developer "could end up owning an entire genre and shutting out creativity for decades," which would stunt innovation and development.[60] For instance, the fact that major franchises like *Halo*, *Gears of War*, and *Call of Duty* are able to coexist in the marketplace without mutually disadvantageous litigation is because no single developer can claim ownership, through copyright, of the "first person shooter" video game genre.[61]

Some game developers, however, cross a line in the extent to which their allegedly new games mimic earlier entries. The video game industry has adopted

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57 *Cf.* Lunsford, *supra* note 7, at 87 ("The videogame industry is booming. Much of this growth can be attributed to the reproduction and re-envisioning of successful game ideas." (footnote omitted)).

58 NIMMER & NIMMER, *supra* note 1, § 2.18[H][3][b].

59 *See, e.g.*, Michael Venables, *Java Pioneer Chris Melissinos on How Video Games Are Changing the Future of Our World*, FORBES (May 10, 2013, 10:50 PM), http://www.forbes.com/sites/michaelvenables/2013/05/10/java-pioneer-chris-melissinos-on-video-games-technological-progress-art-learning [https://perma.cc/8PW8-LJ6G]; Chris Melissinos, Guest Curator of "The Art of Video Games," Keynote Address at the Philadelphia Tech-In-Motion Gaming Expo (Oct. 16, 2014) (discussing how modern video games like *Tomb Raider*, *Uncharted*, and others can trace thematic and gameplay elements to early video games, such as the jungle-themed *Pitfall!* on Atari); *see also* Mike Minotti, *That Looks Familiar—Call of Duty: Advanced Warfare's Riffs from Other Games and Movies*, VENTUREBEAT (May 2, 2014, 2:51 PM), http://venturebeat.com/2014/05/02/that-looks-familiar-call-of-duty-advanced-warfares-riffs-from-other-games-and-movies [https://perma.cc/SM8Z-XVLS] (describing the apparent sources of inspiration for stylistic and gameplay aspects of *Call of Duty: Advanced Warfare* as rooted in prior games and movies).

60 Stephen C. McArthur, *Clone Wars: The Five Most Important Cases Every Game Developer Should Know*, GAMASUTRA (Feb. 27, 2013), http://www.gamasutra.com/view/feature/187385/%20clone_wars_the_five_most_.php [https://perma.cc/2VM5-RJQ3].

61 *Id.*; *see also* Kirk Hamilton, *A Defense of Video Game Cloning*, KOTAKU (Feb. 3, 2012, 4:00 PM), http://kotaku.com/5882132/a-defense-of-video-game-cloning [https://perma.cc/ES8U-KZAJ] ("Can you imagine a world in which one could take legal recourse for game mechanics being stolen? . . . That would mean no more platformers after Super Mario Bros., no more first-person shooters after Doom, no more real-time strategy games after Command & Conquer." (quoting *Kill Screen* magazine co-founder Jamin Warren)).

the term "clone" to refer (often pejoratively, though not always)[62] to video games that copy salient aspects of other games' mechanics, graphics, or stories in order to piggyback on their financial successes.[63] Although the term "clone" is of recent vintage, the video game industry has grappled with the problem of flagrant copying, and the role that copyright protection can and ought to play in protecting video games, since the beginnings of the medium in the late 1970s.[64] Thin copyright protection has not stopped the video game industry from experiencing monumental growth and booming cultural importance.[65] But as the tools for programming new mobile games become more widely disseminated and user friendly,[66] and as mobile gaming continues to grow in popularity, cloning games has become easier, more widespread, and more lucrative for clone developers, while commensurately becoming more harmful to innovative developers.[67]

The structure of the mobile gaming industry encourages this state of affairs. If a clone can siphon off even a small portion of a blockbuster antecedent game's sales, either by confusing customers or by offering a cheaper knockoff gaming experience, then the clone can turn a profit without the hassle of devising something new.[68] Many clone developers market their copied games as free

62 For instance, the game *League of Legends* remains wildly popular and esteemed even though it is an acknowledged clone of its direct competitors *Defense of the Ancients* (*DOTA*) and *DOTA 2*. *See* Russell Holly, *Dota 2 vs League of Legends—An Action RTS Showdown*, GEEK (Apr. 24, 2012, 9:32 AM), http://www.geek.com/games/dota-2-vs-league-of-legends-an-action-rts-showdown-1484359 [https://perma.cc/LGR4-TJJE] (highlighting the significant similarities in gameplay between *DOTA 2* and *League of Legends*, but still recommending both games to prospective players).

63 *See* Brian Casillas, Comment, *Attack of the Clones: Copyright Protection for Video Game Developers*, 33 LOY. L.A. ENT. L. REV. 137, 138-39 (2013) ("Clones are games emulated by copycats ('clone developers') who intend to capitalize on the success of an existing game . . . . While developers of clones may not be guilty of literal copying of a preexisting game, they typically copy various elements of an original title, including the artistic direction and game mechanics."); *see also* Lunsford, *supra* note 7, at 90 ("A videogame clone refers to a game, or game series, that is inspired by, and heavily similar to, another existing videogame title. The term carries a wide range of meanings in the industry. Sometimes the term is used positively to describe an homage or a 'spiritual successor' to the original. Other times, it is used to describe a 'rip off' or 'knock off,' implying the copied game is more like a counterfeit. In the positive sense, cloning is considered the best way for a genre of videogames to develop and improve, and many of today's well-established genres grew out of a series of successful clones." (footnotes omitted)).

64 *See* McArthur, *supra* note 60 ("From the earliest days of the wave of *Pong* clones in 1976, copyright law has been rather ineffective for video game developers who have tried using it to protect their games from competition.").

65 *See* Gaudiosi, *supra* note 9; Tassi, *supra* note 13.

66 *See* Ryan Rigney, *How to Make a No. 1 App with $99 and Three Hours of Work*, WIRED (Mar. 5, 2014, 6:30 AM), http://www.wired.com/2014/03/flappy-bird-clones [https://perma.cc/6BMZ-86QL] (noting that freely available game template source code makes developing clone games easier and cheaper than before).

67 *See generally* Parkin, *supra* note 52.

68 *See, e.g.*, Complaint for Copyright and Trade Dress Infringement at 2, Glu Mobile Inc. v. Hothead Games Inc., No. 14-04917, (N.D. Cal. Nov. 5, 2014) ("Hothead took the all-too-common

versions of the original game's paid app, stealing away the antecedent app's customers[69] but still recouping their investment through in-game advertising revenue. For example, after Dong Nguyen removed *Flappy Bird* from the Apple App Store, an astounding sixty *Flappy Bird* clone apps were submitted for approval to the App Store every day, each trying to cash in on the original's success and fill the vacuum left by its removal.[70] The risk and resulting harm of being cloned is even graver when the original game comes from a small, unsophisticated indie developer without legal counsel or a large marketing budget to fight back against the tide of lookalikes.[71] The recent uptick in cloning behavior, and the threat it poses to innovative mobile developers—and by extension to consumers—has earned the phenomenon the nickname of the "Clone Wars."[72]

II. COPYRIGHT DOCTRINE AND VIDEO GAMES

Video games receive copyright protection under U.S. law.[73] The medium presents a complex amalgam of copyright principles: video games are copyrightable as computer code, as audiovisual representations of that code on a screen, and for the interactions and expression that that computer code enables with its users.[74] Yet "[i]t is said that games are not copyrightable," because game rules and mechanics are considered outside the scope of protectable expression.[75] Because video games contain copyrightable computer code and audiovisual expression, as well as game mechanics that traditionally do *not* receive copyright protection, they present a unique challenge for courts in determining the appropriate scope and contours of copyright protection. The case law on video game clones is scarce, which contributes to this challenge.[76] The decisions that do exist tend to focus more upon the "game" aspects of

shortcut of cloning a leading game in the genre to seize a share of the market (which it quickly did), rather than investing the resources to develop something it truly could call its own.").

69 *See, e.g.*, Complaint for Copyright, Trade Dress, and Trademark Infringement at 3, Big Duck Games, LLC v. Qu, No. 15-00247 (W.D. Wash. Feb. 17, 2015) (including in its complaint user reviews of the alleged copycat game such as "I know this game's a ripoff but hey, it's free!").

70 Tassi, *supra* note 39.

71 *See generally* Vollmer & Wohlwend, *supra* note 7 (responding to a series of rapid clones of the authors' game by describing and publishing the extensive amount of work that went into the development of the original).

72 *See* Lampros, *supra* note 6, at 744 n.10 ("While 'cloning' has been used in the copyright infringement context for years, the term 'Clone Wars' itself was actually popularized by George Lucas's *Star Wars* film franchise, most notably the film STAR WARS: EPISODE II—ATTACK OF THE CLONES (20th Century Fox 2002) . . . . This author's best explanation for the frequent application of the term to video game copyright infringement litigation is that some journalists and scholars may assume that there is some significant overlap between fans of *Star Wars* and the video game playing public.").

73 NIMMER & NIMMER, *supra* note 1, § 2.18[H][3][b].

74 *Id.*

75 *Id.* § 2.18[H][3][a].

76 *See* Lunsford, *supra* note 7, at 88-89 ("Few cases have been decided regarding videogames [sic] clones, leaving many confused over whether cloning constitutes copyright infringement.").

video games (i.e., the rules and mechanics), and extend only minimal copyright protection to games, typically finding for defendant game developers.[77]

In this Part, I address how copyright doctrine has evolved in its application to video games since the earliest cases addressing the topic in the early 1980s. This Part focuses on where courts have drawn the line between idea and expression in video games and applied the so-called "limiting doctrines" of merger and scènes à faire in determining which elements are protectable. This discussion establishes the status quo for copyright doctrine as it applies to video games, in contrast to the more "optimized" copyright regime that may be in its early stages of development.[78]

A. *Copyrightable Subject Matter*

Copyright protection applies to "original works of authorship fixed in any tangible medium of expression."[79] The Copyright Act enumerates several categories of protectable works, including "literary works"; "musical works"; "pictorial, graphic, and sculptural works"; "motion pictures and other audiovisual works"; and "sound recordings."[80] Video game software—that is, the computer code that makes a video game function—is protectable intellectual property because "a computer program can be the subject of a copyright as a literary text."[81] Therefore, a developer who clones a video game by copying the actual underlying computer software for the game has engaged in copyright infringement.[82]

Consumers who buy and play video games focus on the audiovisual experience of playing games, not the games' codes, which most players never see. Because a clone developer can write distinct software code that closely mimics the audiovisual aspects and gameplay of an antecedent game, verbatim copying of software code is unnecessary.[83] Fortunately, courts have found that the display of images on a video game screen is itself separately copyrightable as an audiovisual work.[84] Although "[e]ach time a game is played, the audiovisual

77 *See* McArthur, *supra* note 60 ("[C]opyright law has been rather ineffective for video game developers who have tried using it to protect their games from competition."); *see also* Casillas, *supra* note 63, at 139 n.8 (providing excerpts from four cases of alleged video game copyright infringement in which the courts ruled for the defendants).

78 This Part draws upon Christopher Lunsford's excellent Comment, *supra* note 7, at 93-105.

79 17 U.S.C. § 102(a) (2012).

80 *Id*.

81 Williams Elecs., Inc. v. Artic Int'l, Inc., 685 F.2d 870, 875 (3d Cir. 1982).

82 NIMMER & NIMMER, *supra* note 1, § 2.18[H][3][b].

83 *See* Atari Games Corp. v. Oman, 888 F.2d 878, 885-86 (D.C. Cir. 1989) ("A knock-off manufacturer could . . . write a computer program which would exactly replicate the audiovisual display but which would not replicate the underlying program." (quoting William Patry, *Electronic Audiovisual Games: Navigating the Maze of Copyright*, 31 J. COPYRIGHT SOC'Y USA 1, 5 (1983))).

84 *See* Atari, Inc. v. Amusement World, Inc., 547 F. Supp. 222, 226 (D. Md. 1981) ("[T]he 'Asteroids' game clearly fits the [Copyright] Act's definitions of copyrightable material . . . . In order

work could be unique"[85] because of different interactive choices made by the player, courts have still found that video games satisfy the "fixation" requirement under copyright law.[86]

B. *Idea–Expression Dichotomy in Video Games*

The most basic tenet of copyright holds that "while one's expression of an idea is copyrightable, the underlying idea one uses is not."[87] This distinction is referred to as the idea–expression dichotomy, and traces back to the seminal case *Baker v. Selden*.[88] In *Baker*, the Supreme Court held that while an individual may hold a copyright in a work (such as a book) that expounds upon a particular system or concept (there, a "peculiar system of book-keeping"), copyright protection does not extend to the system itself, and does not allow the plaintiff to bar people from employing that system.[89] This distinction is now codified in the Copyright Act of 1976.[90] Consequently, in deciding the scope of copyright protection for a particular work, a court must distinguish between elements that are ideas and elements that are expression. This can be a challenging task for courts, especially when dealing with unfamiliar media.[91]

Depending on where a court draws the line between idea and expression for various elements of a game, it may determine that a game's mechanics and

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to receive a copyright, a work must be both copyrightable . . . and fixed in a tangible medium of expression. Plaintiff's 'work' . . . is the visual presentation of the 'Asteroids' game. That work is copyrightable as an audiovisual work and as a motion picture." (citation omitted)); *see also* U.S. COPYRIGHT OFFICE, COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES § 503.1(BA) (3d ed. 2014) (placing video games within the subject matter categories of Motion Pictures and Audiovisual Works); *id.* § 726 ("The U.S. Copyright Office may issue separate registrations for the audiovisual material in a videogame and the computer program that generates that material."); NIMMER & NIMMER, *supra* note 1, § 2.18[H][3][b] ("[T]he display of images and video game screen is itself separately copyrightable as an audiovisual work.").

85 Lunsford, *supra* note 7, at 95.

86 *See id.* at 94-95 (providing examples where courts found the fixation requirement satisfied for video game audiovisuals where video games were stored on circuit boards or compact discs). The fixation requirement stems from the requirement in the Copyright Act that all copyrightable subject matter be "fixed in any tangible medium of expression." 17 U.S.C. § 102(a) (2012); *see also* U.S. COPYRIGHT OFFICE, *supra* note 84, § 807.4 (noting that audiovisual works like video games may be fixed as digital files hosted on servers, or on CD-ROMs, game cartridges, DVDs, or in other formats); NIMMER & NIMMER, *supra* note 1, § 2.18[H][3][b] (discussing how video games meet the fixation requirement in spite of the "transitory duration" of the images that they produce).

87 *Amusement World*, 547 F. Supp. at 228 (citing Mazer v. Stein, 347 U.S. 201, 217 (1954)).

88 101 U.S. 99 (1879).

89 *Id.* at 104.

90 *See* 17 U.S.C. § 102(b) (2012) ("In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work."); *see also* Lunsford, *supra* note 7, at 99 ("Copyright law protects creative expression, not ideas.").

91 *See, e.g.*, Apple Comput., Inc. v. Microsoft Corp., 35 F.3d 1435, 1443 (9th Cir. 1994) ("It is not easy to distinguish expression from ideas, particularly in a new medium.").

gameplay; art assets, including graphics, sounds, and characters; or the "look and feel" of the interface, deserve protection.[92] A game's mechanics are generally not considered copyrightable subject matter, because courts recognize mechanics as ideas rather than expression.[93] However, "[w]hat constitutes a rule of the game, as opposed to an expression of that rule, fundamentally changes what is protectable."[94] The increasing complexity of video games is challenging the exclusion of games from copyrightability and forcing courts to reconsider what aspects of expression may lie in the interstices of gameplay mechanics, game graphics, and the human interactions which they trigger and to which they respond.[95] For instance, "courts have found expressive elements [of game mechanics] copyrightable, including game labels, design of game boards, playing cards and graphical works."[96]

Art assets within a video game, including graphical depictions of game characters, the sound track of a game, background images, and the visual appearance of the interface, are protectable separate from the video game as a whole.[97] Even these elements can have their copyright protection narrowed, though, if they are primarily "functional" in nature, or if their presence in a video game falls under the merger or scènes à faire limiting doctrines, discussed below.[98] For example, in *Capcom U.S.A., Inc. v. Data East Corp.*, the court found that even though the defendant's martial arts fighting game possessed a number of characters that were graphically similar to and shared moves with characters in the plaintiff's game, the merger and scènes à faire doctrines rendered many of these moves and character tropes incapable of protection.[99]

Finally, courts sometimes consider the "look and feel" or "total concept and feel" of a game when deliberating whether a game has infringed copyright.[100] Also known as a graphical user interface (GUI), the look and feel of software typically refers to the user's interaction with it, often taking place through menus.[101] The term also has been used, confusingly, as a description for the overall sensation

92 *See* Lunsford, *supra* note 7, at 96.

93 *See* Tetris Holding, LLC v. Xio Interactive, Inc., 863 F. Supp. 2d 394, 404 (D.N.J. 2012) ("The game mechanics and the rules are not entitled to protection . . . . This distinction . . . between a game's rules and its appearance is merely the application of the familiar idea-expression dichotomy as applied to the particular field of games."); *see also* NIMMER & NIMMER, *supra* note 1, § 2.18[H][3][a] ("It is true that no copyright may be obtained in the system or manner of playing a game or in engaging in any other sporting or like activity.").

94 Lunsford, *supra* note 7, at 98.

95 *See* NIMMER & NIMMER, *supra* note 1, § 2.18[H][3][a] (discussing changes to the "blanket rule of exclusion for games" due to "technology heralded by the computer revolution").

96 *Tetris Holding*, 863 F. Supp. 2d at 404.

97 Lunsford, *supra* note 7, at 99.

98 *Id.*

99 No. 93-3259, 1994 WL 1751482, at *12 (N.D. Cal. Mar. 16, 1994).

100 Lunsford, *supra* note 7, at 96.

101 *Id.*

of gameplay that a video game communicates to a player.[102] This usage threatens to blend the "look and feel" of a game's GUI with a game's mechanics and art assets.[103] In *Atari, Inc. v. Amusement World, Inc.*, an early case that established a precedent of thin copyright protection for video games, the court found no copyright violation in part because it considered the "overall 'feel'" of the plaintiff's and defendant's games to be sufficiently different.[104] By contrast, in the recent case *Tetris Holding*, the court held that "[r]eviewing the videos of the game play [of the plaintiff's and defendant's games] bolsters this conclusion [of substantial similarity] as it is apparent that the overall look and feel of the two games is identical."[105] Of course, to even consider whether the look and feel of two games is similar or identical, the court must first find that the elements that constitute the look and feel of the plaintiff's game are facets of expression, rather than ideas.[106]

C. *Limiting Doctrines*

"There is no litmus paper test by which to apply the idea-expression distinction; the determination is necessarily subjective."[107] Nevertheless, courts have crafted a set of doctrines—the merger and scènes à faire doctrines—to assist them in parsing this line. The merger and scènes à faire doctrines represent the fulcrum in video game copyright law: wherever they are focused along the plane of idea–expression has a significant impact on the scope of protection available to a plaintiff's video game. As both doctrines tend to expand the reach of what is an "idea" versus what is "expression" within a particular work, conceptualizing them more narrowly would offer expanded protection to existing copyrighted works. Such a change has begun to occur in recent case law.[108]

The merger doctrine holds that where there are only a few ways of expressing an idea, not even the expression will be protected by copyright;[109] instead "there is a 'merger' of idea and expression."[110] Because granting copyright protection to expression that has merged with an idea would also sweep the idea into the protected sphere, courts declare instead that the expression becomes

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102 *See, e.g.*, Tetris Holding, LLC v. Xio Interactive, Inc., 863 F. Supp. 2d 394, 410 (D.N.J. 2012) (analyzing the playing experience of the two games at issue and finding that "the overall look and feel of the two games is identical").

103 Consideration of the "look and feel" or "total concept and feel" of copyrighted works has also been criticized for oversimplifying the process of analyzing infringing works. *See* NIMMER & NIMMER, *supra* note 1, § 13.03[A][1][c] ("More broadly, the touchstone of 'total concept and feel' threatens to subvert the very essence of copyright, namely the protection of original *expression*.").

104 547 F. Supp. 222, 230 (D. Md. 1981).

105 863 F. Supp. 2d at 410.

106 *See generally id.* at 400 (beginning the infringement analysis with the "idea–expression dichotomy").

107 Atari, Inc. v. N. Am. Philips Consumer Elecs. Corp., 672 F.2d 607, 615 (7th Cir. 1982).

108 *See infra* Part III.

109 BUC Int'l Corp. v. Int'l Yacht Council Ltd., 489 F.3d 1129, 1143 (11th Cir. 2007).

110 NIMMER & NIMMER, *supra* note 1, § 13.03[B][3].

unprotectable along with the idea.[111] Where the idea and expression are indistinguishable, the expression will be protected only against nearly identical copying.[112] The doctrine has been applied in a variety of settings. One famous case found that a jewelry pin in the form of a jewel-encrusted bee was capable of only one particular form of expression, and therefore merged with the idea of such a pin.[113] Another application of the doctrine has held that a plaintiff's copyright of the text of the rules for a sweepstakes contest could not be upheld because there were a limited number of ways of expressing the substance of the contest rules.[114] Because games of all types, including video games, likewise consist of abstract game mechanics and rules, their sphere of copyrightability is particularly vulnerable to limitation by the merger doctrine.[115]

Scènes à faire refers to "incidents, characters or settings which are as a practical matter indispensable, or at least standard, in the treatment of a given topic."[116] The term is French for "scenes that must be done,"[117] and its premise overlaps in some respects with the merger doctrine.[118] Under scènes à faire doctrine, "similarity of expression, whether literal or nonliteral, which necessarily results from the fact that the common idea is only capable of expression in more or less stereotyped form will preclude a finding of actionable similarity."[119] The doctrine ensures that certain stereotypical or commonly associated elements of particular genres, such as stock characters and plot tropes, cannot be copyrighted. The doctrine applies to the subject matter, style, and genre of a video game.[120] For instance, in a video game (or any other work) based upon vampires, "stakes through the heart, coffins, garlic, and an antagonist who sucks blood from his victims and avoids the sunlight are all standard to the vampire genre, and thus are scènes à faire."[121] As with merger, expression that is treated as scènes à faire in a copyrighted work will receive protection only from "virtually identical copying."[122] There is no hard-and-fast rule for applying scènes à faire; the extent to which the doctrine applies to expression in a particular video game will vary.[123]

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111 *Id*.

112 Apple Comput., Inc. v. Microsoft Corp., 35 F.3d 1435, 1444 (9th Cir. 1994).

113 *See generally* Herbert Rosenthal Jewelry Corp. v. Kalpakian, 446 F.2d 738 (9th Cir. 1971).

114 *See generally* Morrissey v. Procter & Gamble Co., 379 F.2d 675 (1st Cir. 1967).

115 *See* Capcom U.S.A., Inc. v. Data E. Corp., No. 93-3259, 1994 WL 1751482, at *9 (N.D. Cal. Mar. 16, 1994) (discussing how the merger doctrine renders video games "largely unprotectable").

116 Atari, Inc. v. N. Am. Philips Consumer Elecs. Corp., 672 F.2d 607, 616 (7th Cir. 1982).

117 McArthur, *supra* note 60.

118 Lunsford, *supra* note 7, at 104.

119 *N. Am. Philips Consumer Elecs. Corp.*, 672 F.2d at 616.

120 Lunsford, *supra* note 7, at 105.

121 McArthur, *supra* note 60.

122 *N. Am. Philips Consumer Elecs. Corp.*, 672 F.2d at 617.

123 *See id*. at 618 n.11 ("With each video game, the line of demarcation between idea and expression and the extent to which certain expressions may constitute *scènes à faire* will vary.").

D. *Copyright Infringement Tests*

To establish copyright infringement, a plaintiff must prove ownership of a valid copyright,[124] and "copying" of the protected work by a defendant.[125] Because direct evidence of copying is often unavailable, copying may be inferred where the defendant has had access to the copyrighted work, and the accused work is deemed substantially similar to the copyrighted work.[126] Access to a work is usually not contested in video game cases, since most games are widely distributed.[127] Therefore, the crux of most video game copyright disputes centers around the adjudication of "substantial similarity" between the copyrighted and alleged infringing works. Courts use a variety of tests to parse which aspects of a game are protectable and how they should be compared to the infringing works, which further vary depending on the medium of the copyrighted work.[128] The Supreme Court has not declared which is the appropriate test for video game copyright claims.[129] As a result, there is significant divergence among the various circuit courts over which test to employ.[130]

In adjudicating substantial similarity, courts determine which elements of the original work are protected and then analyze only those elements for similarity in the alleged infringing work.[131] After making an initial determination of which elements are ideas and which are expression, courts exclude from the substantial similarity analysis any additional elements that fall under either

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124 Ownership of a valid copyright in a video game is not always clear. For instance, many games utilize publicly available source code as the basis for their games. Video games that are devised using such code, or that otherwise are derived from the code or ideas of other games, may nonetheless be separately registered as an independent copyrighted work, provided they contain new copyrightable expression that is sufficiently different from the work or code from which it derives. *See* U.S. COPYRIGHT OFFICE, *supra* note 84, § 721.8 ("Making only a few minor changes or revisions . . . do[es] not satisfy [the copyrightability] requirement."); *see also id.* § 807.5 (citing Atari Games Corp. v. Oman, 979 F.2d 242, 254 (D.C. Cir. 1992) for the premise that audiovisual works, like video games, must contain a sufficient amount of original and creative human authorship to be copyrightable).

125 *See, e.g.*, Data E. USA, Inc. v. Epyx, Inc., 862 F.2d 204, 206 (9th Cir. 1988); *N. Am. Philips Consumer Elecs. Corp.*, 672 F.2d at 614.

126 *N. Am. Philips Consumer Elecs. Corp.*, 672 F.2d at 614.

127 *See* McArthur, *supra* note 60. The fact that a game was available on the Apple or Android app stores for public download will presumably defeat an argument that defendant lacked access to the game.

128 Lunsford, *supra* note 7, at 100.

129 *Id.*

130 Because the purpose of this Comment is to explore a normative approach to copyright for video games rather than detail the current legal landscape regarding the different articulations of these tests, this Section discusses differences among the substantial similarity tests at a high level.

131 *Id.*; *see also id.* at 101-02 ("The 'ordinary observer test' was adopted and developed by the Second Circuit and is also used in the First, Third, Fifth, and Seventh Circuits. The 'total concept and feel test,' also known as the 'extrinsic/intrinsic test,' emerged from the Ninth Circuit and is additionally used in the Fourth and Eighth Circuits. The Ninth Circuit applies an 'abstraction-filtration-comparison test' for software substantial similarity, which is also used in the Tenth, Sixth, and D.C. Circuits." (footnotes omitted)).

the merger or scènes à faire doctrines as unprotectable.[132] The remaining elements are protectable under copyright. Under the "ordinary observer test," courts ask whether an ordinary person would regard the allegedly infringing work as misappropriating elements of the original copyrighted work.[133] In cases of video game copyright, courts tend to use a more stringent version of this test where the unprotectable elements of the game are excluded from the ordinary observer's consideration.[134] Other circuits use the "extrinsic/intrinsic" test, which resembles the "ordinary observer test" except that before asking whether an ordinary observer would consider two works substantially similar, the court conducts an objective review for similarities between the works, often utilizing expert testimony.[135] Finally, the Ninth Circuit's "abstraction-filtration-comparison" test first abstracts and separates out a work's ideas, using doctrines like scènes à faire and merger.[136] The court then filters out the unprotectable elements from the protectable ones and compares the works.[137] The court considers only "the remaining protectable material for similarity instead of the work as a whole."[138] While the three tests vary in the extent to which they deconstruct and individually analyze component elements of a work before determining similarity, they each utilize the limiting doctrines to separate out the protectable from the unprotectable.

E. *Significant Case Law*

Over the past thirty years, "[t]he predominant pattern in video game cloning cases has been for the court to rule definitively for the defendant."[139] These cases have established a precedent of thin copyright protection for video games, allowing cloning practices to propagate. This Section discusses some of the principal strands of analysis that courts have employed in ruling on video game copyright infringement claims.

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132 *Id.* at 102.

133 *See, e.g.*, *N. Am. Philips Consumer Elecs. Corp.*, 672 F.2d at 614 ("[T]he [ordinary observer] test is whether the accused work is so similar to the plaintiff's work that an ordinary reasonable person would conclude that the defendant unlawfully appropriated the plaintiff's protectible expression by taking material of substance and value."); *see also* Lunsford, *supra* note 7, at 102.

134 *See* Lunsford, *supra* note 7, at 102; *see also, e.g.*, *N. Am. Philips Consumer Elecs. Corp.*, 672 F.2d at 614 ("While dissection is generally disfavored, the ordinary observer test, in application, must take into account that the copyright laws preclude appropriation of only those elements of the work that are protected by the copyright.").

135 *See, e.g.*, Sid & Marty Krofft Television Prods., Inc. v. McDonald's Corp., 562 F.2d 1157, 1164-67 (9th Cir. 1977) (applying the extrinsic/intrinsic test and finding that McDonald's infringed on Sid & Marty Krofft's television series), *superseded by statute*, 17 U.S.C. § 101 (2012); *see also* Lunsford, *supra* note 7, at 102-03 (discussing the Ninth Circuit's "total concept and feel test").

136 *See* Lunsford, *supra* note 7, at 103-04.

137 *Id.* at 103.

138 *Id.* at 103-04.

139 McArthur, *supra* note 60.

Two early cases of video game copyright infringement, in fact, found for plaintiffs and issued preliminary injunctions against their alleged copiers.[140] In *Stern Electronics, Inc. v. Kaufman*, the court found that the gameplay and graphics in defendant's game were "virtually identical" to plaintiff's popular game *Scramble*.[141] Two months later the court in *Midway Manufacturing Co. v. Dirkschneider* similarly found that defendants had produced "for all practical purposes identical" copies of plaintiff's games *Pac-Man*, *Galaxian*, and *Rally-X*.[142] Because the cloned games in these cases were nearly identical, both courts conducted only a surface-level analysis of the original and infringing works without parsing the idea–expression divide or applying the limiting doctrines.[143] These two rulings are inapposite to many subsequent cases of video game cloning for two reasons. First, these cases concerned identical copying,[144] which most cloned games are now wise enough to avoid.[145] Second, video game copyright case law has evolved substantially alongside the medium over the past decades and has developed a more sophisticated inquiry into cases of alleged copying. Today, even when identical or "nearly indistinguishable" elements are present in an infringing video game, courts do not presume infringement as readily as they did in *Stern* or *Dirkschneider*, and instead conduct a more searching analysis.[146]

A few months after the *Dirkschneider* decision, the District Court for the District of Maryland's decision in *Atari, Inc. v. Amusement World, Inc.* established a more thorough and probing template for assessing video game infringement.[147]

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140 *See generally* Stern Elecs., Inc. v. Kaufman, 523 F. Supp. 635 (E.D.N.Y. 1981) (entering preliminary injunction against defendant for releasing a "virtually identical" copy of plaintiff's arcade video game), *aff'd,* 669 F.2d 852 (2d Cir. 1982); Midway Mfg. Co. v. Dirkschneider, 543 F. Supp. 466 (D. Neb. 1981) (same).

141 523 F. Supp. at 639.

142 543 F. Supp. at 476.

143 Arguably these cases did not require a thorough discussion of the interactions of the limiting doctrines with the video game medium. In cases where copying is identical, defendant may not be able to rely upon the merger and scènes à faire doctrines to render protectable expression unprotected. *See* Atari, Inc. v. N. Am. Philips Consumer Elecs. Corp., 672 F.2d 607, 617 (7th Cir. 1982) (discussing how certain expressive aspects of *Pac-Man* are scènes à faire and receive protection only from virtually identical copying).

144 *See Stern*, 523 F. Supp. at 639 ("The sequence of images and sounds that appears on the screen when the game has started—the 'play mode'—is virtually identical in the two games. . . . [T]he copying of the play mode . . . constitute[s] a copyright infringement."); *see also Dirkschneider*, 543 F. Supp. at 476 ("The defendants' Galactic Invaders game is for all practical purposes identical to the plaintiff's Galaxian game."); *id.* at 477 ("The defendants' Mighty Mouth game is, for all practical purposes, identical to the plaintiff's Pac-Man game.").

145 *See* Casillas, *supra* note 63, at 169 ("[T]he majority of clones are visually distinct enough that an observer can tell they are not the same game when placed next to whichever game they are allegedly copying . . . .").

146 *See, e.g.*, Tetris Holding, LLC v. Xio Interactive, Inc., 863 F. Supp. 2d 394, 409-15 (D.N.J. 2012) (conducting an in-depth review of copyrightable elements in *Tetris* and the application of the merger and scènes à faire doctrines in spite of finding that, "the overall look and feel of the two games is identical").

147 547 F. Supp. 222 (D. Md. 1981).

The *Amusement World* decision also diluted the protections granted to original games, and thus "paved the way for developers to create games closely resembling established and successful games first created by other companies."[148] In 1979, Atari released the arcade game *Asteroids*, which went on to become a massive hit.[149] Two years later a competing company released *Meteors*, a game that shared many features with Atari's game and which "most would describe today as a 'clone' of *Asteroids*."[150] The court found that *Asteroids* satisfied the subject-matter test of copyright as an audiovisual work, that it had been fixed in a medium, and that defendant's access to it was presumed by the wide distribution of *Asteroids* to arcades.[151] The court then applied the ordinary observer test to resolve the question of substantial similarity.[152] First, the court isolated what it considered to be the core idea of *Asteroids*, "[A] video game in which the player shoots his way through a barrage of space rocks."[153] The court acknowledged twenty-two similarities between the two games, and nine differences.[154] However, it noted that the great number of commonalities would *not* be dispositive of copyright infringement if the doctrines of merger and scènes à faire[155] rendered those similar elements unprotectable in the copyrighted work—that is, if the similarities were "forms of expression that simply cannot be avoided in any version of the basic idea of a video game involving space rocks."[156]

The court duly invoked the limiting doctrines in ruling that *Meteors* was not substantially similar to *Asteroids*. The court determined that the necessary elements of a space-rock shooting game accounted for substantially all of the elements that *Meteors* had copied: "[M]ost of these similarities are inevitable, given the requirements of the idea of a game involving a spaceship combating space rocks and given the technical demands of the medium of a video game."[157] Mimicking these unprotectable elements therefore could not infringe plaintiff's

148 *See* McArthur, *supra* note 60.

149 *Id.*

150 *Id.*; *see also Amusement World*, 547 F. Supp. at 224-26 (enumerating the similar or identical design features shared by the two games at issue, as well as the different features).

151 *Amusement World*, 547 F. Supp at 226-27.

152 *See id.* at 227 ("[T]here is substantial similarity where the ordinary observer, unless he set out to detect the disparities, would be disposed to overlook them, and regard their aesthetic appeal as the same." (quoting Novelty Textile Mills, Inc. v. Joan Fabrics Corp., 558 F.2d 1090, 1093 (2d Cir. 1977))).

153 *Id.* at 229.

154 *Id.* at 224-26.

155 While the *Amusement World* court did not use the term "merger" in its discussion of this doctrine, the description of it was consistent with the way that other courts use the merger doctrine, and relied upon the very same foundational case. *See id.* at 228-29 (citing the *Kalpakian* case in discussing the concept of merger); *see also* Atari, Inc. v. N. Am. Philips Consumer Elecs. Corp., 672 F.2d 607, 616 (7th Cir. 1982) (discussing how the idea–expression dichotomy could lead to a finding of no infringement despite substantial similarity).

156 *Amusement World*, 547 F. Supp. at 229.

157 *Id.*

copyright.[158] Because these similarities were "inevitable," the presence of certain "dissimilarities bec[ame] particularly significant"—enough so to make *Meteors* not substantially similar to *Asteroids*.[159] Even admitting that, "bluntly, [Amusement World] took [Atari]'s idea," the court found no copyright violation.[160]

The *Amusement World* court reached this conclusion through a set of doctrinal moves. The court first broadly defined what the ideas of the game entailed.[161] It then hemmed in the range of possible expression of those ideas by construing the universe of such expression narrowly and by focusing on the limits of the available technology.[162] Through this approach, the court concluded that *Asteroids* had very few protectable elements.[163] The court's methodology, in particular its application of the merger and scènes à faire doctrines, has proven influential in subsequent video game copyright cases, many of which have reiterated and reinforced this approach.[164] In *Data East USA v. Epyx, Inc.* the District Court for the Northern District of California found fifteen similar features between the parties' respective karate video games, including specific karate moves (such as a low kick), game rules, alternating game backgrounds, and the presence of a referee during karate matches.[165] The district court granted a permanent injunction against defendant's alleged cloned game.[166] On review, the Ninth Circuit stringently applied the idea–expression dichotomy and the merger and scènes à faire doctrines to exclude unprotectable elements from the substantial similarity analysis.[167] In reversing the finding of substantial similarity, the Ninth Circuit held that the fifteen similar features "necessarily follow[ed] from the *idea* of a martial arts karate combat game, or

158 *Id.* ("All these requirements of a video game in which the player combats space rocks and spaceships combine to dictate certain forms of expression that must appear in any version of such a game. In fact, these requirements account for most of the similarities between 'Meteors' and 'Asteroids.' Similarities so accounted for do not constitute copyright infringement, because they are part of plaintiff's idea and are not protected by plaintiff's copyright.").

159 *Id.*

160 *Id.* at 230.

161 *Id.* at 229-30.

162 *Id.*

163 *See* Lunsford, *supra* note 7, at 107 ("[D]espite the similarities, the resemblances only pertained to unprotectable elements.").

164 *See, e.g.*, Atari Games Corp. v. Oman, 888 F.2d 878, 885 (D.C. Cir. 1989) (citing the discussion in *Amusement World* of merger and idea–expression in reversing the decision of the Register of Copyrights to deny copyright to a video game); Frybarger v. Int'l Bus. Machs. Corp., 812 F.2d 525, 530 (9th Cir. 1987) (citing the *Amusement World* court's application of the merger doctrine in affirming summary judgment for defendant-infringers); Atari, Inc. v. N. Am. Philips Consumer Elecs. Corp., 672 F.2d 607, 620 (7th Cir. 1982) (validating the *Amusement World* court's discussion of merger and scènes à faire while distinguishing it in granting preliminary injunction for plaintiff game developers).

165 862 F.2d 204, 209 (9th Cir. 1988).

166 *Id.* at 205.

167 *Id.* at 209 ("[T]he [lower] court did not give the appropriate weight and import to . . . the similarities [that] result from unprotectable expression.").

are inseparable from, indispensable to, or even standard treatment of the *idea* of the karate sport. As such, they are not protectable."[168] The court also noted that the range of possible expression of a karate tournament game was contained by the technical limitations of the hardware,[169] echoing the *Amusement World* court's invocation of "technical demands" as limiting the variety of expression that could spring from any particular idea, and thus making the merger of expressive elements into that idea more likely.[170]

In a subsequent case, *Capcom U.S.A. v. Data East Corp.*, which considered another pair of martial arts games, the court took an even more detailed look at the constituent elements of a game in finding no substantial similarity.[171] Plaintiffs alleged that defendant's game *Fighter's History* had copied the fighting styles, appearances, and moves of its own game, *Street Fighter II*.[172] The defendant countered that plaintiff Capcom's game relied heavily on stereotypical characters and fighting moves that were commonplace in the karate-game genre—that they were scènes à faire—or that they were essential to such a game and therefore merged with the idea of a karate game.[173] The court held for the defendant.[174] The court admitted that "of the eight pairs of characters and twenty-seven special moves at issue, three characters and five special moves in Fighter's History are similar to protectable characters and special moves in Street Fighter II."[175] However, "[t]hese figures must be cast against the fact that Street Fighter II has a total universe of twelve characters and six hundred and fifty moves. Capcom concedes, as it must, that the vast majority of the moves are unprotectable because they are commonplace kicks and punches."[176] Although three of the characters were found to be copied, that was not sufficient to establish substantial similarity for the work as a whole.

The *Capcom* case also restated and reaffirmed a generally skeptical view of copyright protection for video games: "As a result [of the merger doctrine], copyright protection does not encompass games as such, since they consist of abstract rules and play ideas. It follows, therefore, that audiovisual works like the two presently before the Court are largely unprotectable games."[177]

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168 *Id.* at 209.

169 Lunsford, *supra* note 7, at 108.

170 *See* Atari, Inc. v. Amusement World, Inc., 547 F. Supp. 222, 229 (D. Md. 1981) (finding some similarities "inevitable given the requirements of the idea of a game . . . and given the technical demands of the medium of a video game").

171 *See* No. 93-3259, 1994 WL 1751482 (N.D. Cal. Mar. 16, 1994) (finding similarities between three of eight characters and five of twenty-seven special moves); *see also* Lunsford, *supra* note 7, at 110 (discussing the "detailed analysis of each character" the court had performed).

172 *Capcom*, 1994 WL 1751482, at *1.

173 *Id.* at *2.

174 *Id.* at *9.

175 *Id.* at *12.

176 *Id.*

177 *Id.* at *9 (citations omitted).

The *Amusement World*, *Epyx*, and *Capcom* cases are just three of "about a dozen cases resulting in favorable rulings for developers accused of 'cloning,' even where those developers had purposefully imitated the original work."[178] Together, the three cases aptly illustrate the general method of applying the idea–expression dichotomy and the limiting doctrines to a video game. Courts applying the limiting doctrines in this manner, however, have not uniformly found for defendants in video game copyright claims. The court in *Atari, Inc. v. North American Philips Consumer Electronics Corp.* (*Pac-Man*) conducted a nuanced application of the relevant doctrines in determining whether the game *Pac-Man* had been improperly copied.[179] First, the court declared what it considered to be the primary idea of *Pac-Man*: "A maze-chase game in which the player scores points by guiding a central figure through various passageways of a maze and at the same time avoiding collision with certain opponents or pursuit figures which move independently about the maze."[180] The court noted that because of merger the work was "primarily an unprotectible game," but that to a limited extent, the particular form in which this idea was expressed provided something additional over the basic idea.[181] In particular, "[t]he audio component and the concrete details of the visual presentation constitute the copyrightable expression of that game 'idea.'"[182] The court then excluded a number of elements from protectability because they were scènes à faire, such as the maze, scoring table, and tunnel exit aspects of the game.[183] However, the court ultimately found that the Pac-Man character and "ghost" pursuit figures in *Pac-Man* were fanciful and expressive elements of the game, and that the defendant's game's manifestations of these characters were substantially similar.[184] This was sufficient to hold that defendant's work had infringed on plaintiff's copyright. In making this finding, the court specifically distinguished the fact pattern in *Amusement World*, noting that "[t]his case is a far cry from [*Amusement World*] in which . . . minor variations or differences were sufficient to avoid liability because the form of expression was inextricably tied to the

178 McArthur, *supra* note 60.

179 *See* 672 F.2d 607, 610-13 (7th Cir. 1982).

180 *Id.* at 617.

181 *Id.*

182 *Id.*

183 *See id.* ("Certain expressive matter in the PAC–MAN work, however, should be treated as *scenes a faire* and receive protection only from virtually identical copying. The maze and scoring table are standard game devices, and the tunnel exits are nothing more than the commonly used 'wrap around' concept adapted to a maze-chase game. Similarly, the use of dots provides a means by which a player's performance can be gauged and rewarded with the appropriate number of points, and by which to inform the player of his or her progress.")

184 *See id.* at 618 ("[Defendant] not only adopted the same basic characters but also portrayed them in a manner which made K. C. Munchkin appear substantially similar to PAC–MAN.").

game itself."[185] Unfortunately for many game developers, the *Pac-Man* case has not set the general standard for video game copyright.

III. SHIFTS IN CASE LAW

Since the heyday of Atari, Midway, and other game developers during the "golden age" of video games in the 1980s,[186] the genre has made prodigious advancements in the graphical prowess, computing power, and general sophistication of its offerings, as well as the ease with which video games are developed and distributed.[187] The ubiquity of mobile game development aids the creation of original games as well of obvious clones of existing expression. Courts appear to have begun acknowledging this new paradigm of rapid innovation and cloning in video games and recognizing that the policy embodied in most video game precedent no longer faithfully serves the functions of copyright in optimizing the creation of original works. Recent decisions appear to create, or at least invite, precedent that could profoundly shift the legal protections available to video game developers going forward. These decisions do so by redrawing the idea–expression divide and the application of merger and scènes à faire in ways that expand the copyright protections for existing works.

A. Tetris Holding, LLC v. Xio Interactive, Inc.

Created in 1984, *Tetris* has become one of the best known games, and has since been released on myriad platforms, including smartphones.[188] In 2009, the studio Xio released its game *Mino* on the Apple App Store.[189] The game mirrored *Tetris*, with identical gameplay and game pieces featuring the same colors and shapes as those in *Tetris*.[190] The makers of *Mino* in fact admitted that they had downloaded Tetris Holding's iPhone app to help with developing *Mino*, and that they meant it to be their "version" of *Tetris*.[191] The game was unquestionably a clone. Xio claimed, however, to have reviewed the copyright laws applying to video games and determined that, based on the scènes à faire and merger doctrines, there was little copyrightable expression left in *Tetris*

185 *Id.* at 620.

186 *See* Bill Loguidice, *What is the Golden Age of Videogames?*, ARMCHAIR ARCADE (Oct. 22, 2009, 10:11 AM), http://www.armchairarcade.com/neo/node/2975 [https://perma.cc/LGT9-3M8X] (defining the "Golden Age" of video games as occurring from 1976 to 1984); *see generally Golden Age of Video Games*, ENCYCLOPEDIA GAMIA, http://gaming.wikia.com/wiki/Golden_age_of_video_games [https://perma.cc/WFU3-KR34] (defining the Golden Age as lasting from roughly the late 1970s to the mid 1980s).

187 *See supra* Part I.

188 *See* Tetris Holding, LLC v. Xio Interactive, Inc., 863 F. Supp. 2d 394, 396 (D.N.J. 2012).

189 *Id.* at 397.

190 *Id.* at 397-98.

191 *Id.* at 397.

to infringe.[192] Xio believed that because *Tetris* was a puzzle game of abstract mechanics, it possessed minimal artistic expression.[193]

The court disagreed. After reviewing the relevant copyright precedent, including discussions on the merger and scènes à faire doctrines, the court came to the following conclusions. First, the scènes à faire doctrine has very little relevance to games, like *Tetris*, that are "purely fanciful" and lack any grounding in the real world, because there are no standard or stock expressive elements common to an abstract puzzle game.[194] Next, the court declared the idea of *Tetris* to be

> a puzzle game where a user manipulates pieces composed of square blocks, each made into a different geometric shape, that fall from the top of the game board to the bottom where the pieces accumulate. The user is given a new piece after the current one reaches the bottom of the available game space. While a piece is falling, the user rotates it in order to fit it in with the accumulated pieces. The object of the puzzle is to fill all spaces along a horizontal line. If that is accomplished, the line is erased, points are earned, and more of the game board is available for play. But if the pieces accumulate and reach the top of the screen, then the game is over.[195]

These were the general ideas underlying *Tetris*, which could not be protected. The court then went on to hold, surprisingly, that in addition to the inapplicability of the scènes à faire doctrine, the merger doctrine also did not apply here, noting that "there [were] many novel ways Xio could have chosen to express the rules of *Tetris*. Xio's own expert admitted there [were an] 'almost unlimited number' of ways to design the pieces and the board and the game would still 'function perfectly well.'"[196] As a result, the court found that elements such as the dimensions of the playing field, the appearance of shadow pieces, the display of the next piece about to fall, and the display of

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192 *See* Xio Interactive Inc.'s Reply Brief in Support of Its Motion for Summary Judgment at 3-4, *Tetris Holding*, 863 F. Supp. 2d 394 (D.N.J. 2012) (No. 309-6115), 2011 WL 7431886 (arguing that copyright and trade dress do not protect rules, game mechanics, or functional elements).

193 *See Tetris Holding*, 863 F. Supp. 2d at 399 ("Before releasing its product, Xio researched copyright law, both through its own independent studying and based on advice of counsel, before designing its game. Based on this research, Xio believed it could freely copy any part of *Tetris* that was based on a 'rule of the game' or that Xio viewed as being functional to the game." (footnote omitted)); *see also* Xio Interactive Inc.'s Reply Brief, *supra* note 192, at 3-4 (arguing that *Tetris* was largely or entirely unprotectable instead of relying on a claim that there was protectable expression in *Mino*).

194 *See Tetris Holding*, 863 F. Supp. 2d at 408 (distinguishing the gameplay of a puzzle game like *Tetris* from the gameplay in games in the *Epyx* case, on the basis that karate tournaments occur in real life and certain scènes à faire elements would rightfully not be protectable).

195 *Id.* at 409.

196 *Id.* at 412.

"garbage" lines were protected expression.[197] In granting summary judgment for the plaintiff, the court noted that Xio could have used the same ideas behind *Tetris* to design a video game with wholly unique expression.[198] The court thought that Xio was all the more able to do so, compared to earlier game developers, given the rise in computer power and graphics.[199] Rather than devise an original take on the idea of *Tetris*, Xio aped it outright. "There [was] such similarity between the visual expression of *Tetris* and *Mino* that it [was] akin to literal copying."[200]

The *Tetris Holding* case represents a sharp break from precedent. By identifying the rules of *Tetris* at a high level of abstraction, the court was able to imagine other manifestations of those rules and ideas that would have resulted in unique expression.[201] The court's analysis created analytical daylight between the ideas underlying *Tetris* and their specific expression in *Tetris*, enabling the court to hypothesize that other, distinct expression could also exist. The court found that the merger doctrine therefore did not foreclose protectability for most aspects of the *Tetris* game, signifying the court's belief that a competing game developer could create a game that manifested *Tetris*'s fundamental ideas without having to utilize *Tetris*'s same expression in doing so. The court clarified that expression related to game rules may still be protectable, even if the rules of the game are not protectable.[202] The court also specifically discounted the application of scènes à faire to abstract puzzle games. Although this was a case of essentially "identical" copying, much like the early *Stern* and *Dirkschneider* cases, the *Tetris Holding* court did not ignore the merger and scènes à faire doctrines; instead, it reasoned through the unique applications of those doctrines to games like *Tetris* and ultimately determined that they would not properly apply.[203]

The *Tetris Holding* case identifies another key element that allows courts a principled means of distinguishing today's video game cases from earlier precedent: technological advancement. Technological limits present an ever-shrinking barrier to expression for video game makers, and the court believed that if Xio had tried, it could have invented many other ways of expressing the rules of *Tetris*. This is in contradistinction to the findings in *Amusement World* and

197 *See id.* at 413 ("None of these elements are part of the idea (or the rules or the functionality) of *Tetris*, but rather are means of expressing those ideas.").

198 *Id.*

199 *See id.* at 412 ("Considering the exponential increase in computer processing and graphical capabilities since that unique variation on *Tetris*'s rules, the Court cannot accept that Xio was unable to find any other method of expressing the *Tetris* rules other than a wholesale copy of its expression.").

200 *Id.* at 410.

201 *See* Casillas, *supra* note 63, at 168 ("Tetris Holding's victory in the case was only guaranteed once it convinced the court to identify the underlying game rules and game play at a 'high level'.").

202 *See Tetris Holding*, 863 F. Supp. 2d at 404-05.

203 *Id.*

Epyx, where the limits of video game technology allegedly foreclosed other expressive avenues, and therefore expanded the reach of the merger doctrine.

B. Spry Fox LLC v. LOLApps Inc.

In 2011, Spry Fox LLC developed *Triple Town*, a game in which players match different objects on a screen to create new objects in an ascending hierarchy.[204] Spry Fox contracted with another studio, 6Waves LLC, to help port this game to Facebook and potentially to the Apple App Store.[205] A few months later, 6Waves announced that it would no longer assist Spry Fox and that it was releasing its own App Store game, *Yeti Town*, which a 6Waves executive admitted had a "similar match-3 style" to *Triple Town*.[206] Spry Fox sued for copyright infringement, and 6Waves moved to dismiss.[207] The court undertook a full analysis of the merits of Spry Fox's copyright infringement claim, and found its claim sufficiently plausible to survive a motion to dismiss.

The court began with the familiar discussion of idea–expression, merger, and scènes à faire. The court defined the "idea" of *Triple Town* as "a hierarchical matching game, one in which players create objects that are higher in the hierarchy by matching three objects that are lower in the hierarchy. Frustrating the player's efforts are antagonist objects; aiding the player are objects that destroy unwanted or ill-placed objects."[208] Spry Fox had no copyright claim in this idea, but the company expressed this idea with its own object hierarchy (for example, matched bushes turn into trees and matched trees turn into houses), its own characters (for example, a bear as an antagonist in the game), and placed them on a field of play resembling a meadow.[209] The court excluded some elements of *Triple Town* as scènes à faire that appear in many video games, including the use of coins to keep score and an in-game marketplace to redeem coins for advantages in the game.[210] It further excluded some elements of the game that it considered "functional," namely the game's choice of a six-by-six grid game board.[211] But the court nonetheless found that many elements

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204 *See* Spry Fox LLC v. LOLApps Inc., No. 2:12-00147, 2012 WL 5290158, at *1-3 (W.D. Wash. Sept. 18, 2012).

205 *Id.* at *1.

206 *Id.*

207 *Id.* at *2.

208 *Id.* at *4.

209 *Id.* at *5.

210 See *id.* ("The use of points and 'coins' to reward a player's progress through a game is standard.")

211 *See id.* at *6 ("Spry Fox's choice of a six-by-six game grid is not likely an expressive choice. A grid that is too small would make the game trivial; a grid that is too large would make it pointless. There is perhaps a range of functionally appropriate choices for the dimensions of the game grid; perhaps a seven-by-seven grid, or a six-by-seven grid, would serve the game's purposes just as well. But it would extend copyright protection beyond its proper scope to afford protection to a functionally-dictated choice like this one."); *see also* Incredible Techs., Inc. v. Virtual Techs., Inc.,

of *Triple Town* were expressive and had been appropriated into a substantially similar work in *Yeti Town*, including the hierarchy of objects, the depiction of the playing field, and the presence of an antagonistic wild creature that tried to foil the player's progress.[212] This was in spite of the fact that there were clear visual differences between those elements in the games: *Triple Town* had a pastoral theme, while *Yeti Town* took place on a snowfield, and the objects and characters were distinct.[213] The court nonetheless found that the object hierarchy and field of play in *Yeti Town* "comprise[d] a setting and theme that [were] similar to *Triple Town*'s."[214] Evidence that numerous online bloggers also found *Triple Town* and *Yeti Town* substantially similar to each other cemented the court's finding of plausible substantial similarity.[215] The court denied defendant's motion to dismiss the copyright claim; the defendant later settled and granted all of the *Yeti Town* intellectual property to *Spry Fox*.[216]

The *Spry Fox* decision, like the *Tetris Holding* decision, demonstrates greater concern for video game developers whose original games are being cloned. Both cases dealt with games available on the Apple App Store that were copied. This seems to indicate greater concern with protecting original works of authorship in this space and is perhaps tied to the increasing economic importance of the mobile gaming industry. Although *Spry Fox* only came up on a motion to dismiss, the case is significant for the fact that, unlike the identical copying in *Tetris Holding*, the court found substantial similarity plausible even though *Yeti Town*'s artwork and sound elements were readily distinguishable from *Triple Town*'s.[217] As the court put it, "There are apparent differences between [the] games . . . but a court must focus on what is similar, not what is different, when comparing two works."[218]

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400 F.3d 1007, 1012 (7th Cir. 2005) (dismissing copyright infringement claim by a golf arcade video game on the basis that the elements copied by defendant, such as a trackball operating system for the game, were functional and not subject to copyright).

212 *See Spry Fox*, 2012 WL 5290158, at *6 ("The object hierarchy is similar. Progressing from grass to bush to tree to hut is similar to progressing from sapling to tree to tent to cabin. Perhaps more importantly, the object hierarchy coupled with the depiction of the field of play comprise a setting and theme that is similar to Triple Town's. A snowfield is not so different from a meadow, bears and yetis are both wild creatures . . . .").

213 *Id.* at *2.

214 *Id.* at *6.

215 *Id.* at *7.

216 *See* McArthur, *supra* note 60 (noting that 6Waves "quickly settled and granted all of *Yeti Town*'s intellectual property to Spry Fox."); *see also* Kathleen De Vere, *Update: 6Waves, Spry Fox Settle Triple Town Cloning Suit*, ADWEEK (Oct. 12, 2012, 8:18 AM), http://www.adweek.com/socialtimes/6waves-spry-fox-settle-triple-town-cloning-suit/532155 [https://perma.cc/8LRQ-DUTN] (quoting Spry Fox cofounder David Edery stating that, "The full terms of the settlement are confidential, but I can disclose that as a consequence of the settlement, ownership of the Yeti Town IP has been transferred to Spry Fox").

217 *Spry Fox*, 2012 WL 5290158, at *6.

218 *Id.*

The *Spry Fox* opinion is another example, with *Tetris Holding*, of a court stating a broad premise for the original game's idea and applying the merger and scènes à faire doctrines with a light touch, as to defeat the significant limiting effects of those doctrines. The court's consideration of the opinions of online bloggers who had labeled *Yeti Town* a clone also represents unprecedented contact between the courts and those among the gaming public who patrol the gaming ecosystem for cloned games that harm developers.

C. DaVinci Editrice S.R.L. v. ZiKo Games, LLC

The most recent case to address copyright law as it applies to games actually concerns a roleplaying card game, not a video game. Yet the court's decision in *DaVinci* to deny a motion to dismiss a copyright infringement claim, like that in *Spry Fox*, reveals much about how courts are shaping the idea–expression divide and the limiting doctrines to protect expression in games of all forms. In 2002, the Italian company DaVinci Editrice released *Bang!*, a roleplaying card game featuring Wild West themes.[219] The players of *Bang!* take on one of four roles—Sheriff, Deputy, Outlaw, or Renegade—with the objective of killing the other players.[220] Different alliances exist between the various roles, which affect how gameplay progresses.[221] In addition to receiving an assigned role, each player is provided a unique character card, based on Wild West figures, with names like "Calamity Janet" and "Willy the Kid"; each character card has an assigned set of capabilities and a maximum number of life points.[222] Play progresses by players drawing cards and taking actions, like shooting at each other to eliminate characters, dodging attacks, and putting other players in jail.[223] The distance between players affects which characters can eliminate each other, and different weapon cards enable characters to shoot at players who are further away.[224] The cards themselves have western themes, such as "Jail," "Dynamite," "Barrel," and "Horse," and the various weapon cards are also western themed.[225] The game ends when either the Sheriff is killed, meaning the Renegade or Outlaws win, or the Outlaws and Renegade are killed, meaning the Sheriff and Deputies win.[226] Critics praised *Bang!* and the game became a commercial success.[227]

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219 DaVinci Editrice S.R.L. v. ZiKo Games, LLC, No. 13-3415, 2014 WL 3900139, at *1 (S.D. Tex. Aug. 8, 2014).

220 *Id.*

221 *Id.*

222 *Id.* at *2.

223 *Id.* at *2-3.

224 *Id.*

225 *Id.*

226 *Id.*

227 *See id.* at *1 (noting that the game won the Origins Award for "Best Traditional Card Game of 2003" and "Best Graphic Design of a Card Came or Expansion of 2003").

Defendant ZiKo, based in China, sold an "ancient Chinese" themed roleplaying game called *Legend of the Three Kingdoms* (*LOTK*).[228] Both parties agreed that *LOTK*'s gameplay was "nearly identical" to that in *Bang!*, with themed roles fulfilling the exact same purposes as the four roles in *Bang!*, the same winning conditions, the same use of life points, the same action card functions, and the same rule of having unique character cards with special abilities.[229] The main difference was that *LOTK* expressed these elements through the setting, artwork, and general theme of ancient China instead of the Wild West.[230] DaVinci sued ZiKo for copyright infringement and sought a preliminary injunction; ZiKo filed a motion to dismiss, arguing the familiar defense that the identical or similar elements between the two games were systems, methods, or procedures that could not receive copyright protection.[231]

At first blush, the case may seem inapposite within a discussion of video game copyright. After all, the *DaVinci* court began its decision with a review of copyright precedent as it related to card games.[232] The decision acknowledged that games have historically received exceptionally thin copyright protection and that "[c]ourts have ruled that the limited opportunity for expression significantly curtails the scope of copyrightable material in traditional card games."[233] But the court then made an interesting pivot. The court isolated and distinguished the limiting precedent of card game copyright by noting that "these constraints are much less apparent in newer forms of card games not subject to the limits of the 52-card deck."[234] Instead, "More recent cases involving newer forms of card games and *electronic games* indicate that the protection for game content in these contexts may be more extensive than the

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228 *Id.* at *3.

229 *Id.* at *3-4.

230 The court summarized the similarities as follows:

> Both *Bang!* and *LOTK* are turn-based card games in which most of the players have hidden roles. Both games have identical mechanisms and rules for one player to attack other players or defend against attack. Each successful attack reduces a player's life points. The physical positions of the players around a table is the same. The 'Monarch,' 'Minister,' 'Rebel,' and 'Turncoat' roles from *LOTK* correspond to the Sheriff, Deputy, Outlaw, and Renegade roles of *Bang!*. These roles are functionally identical and subject to the same rules. As the names reflect, the *LOTK* roles are named to invoke ancient Chinese figures; the *Bang!* roles are named to invoke the Wild West.

Id. at *4.

231 *Id.* at *6.

232 *Id.* at *6-7

233 *Id.* at *7. "[A] complainant can acquire no exclusive rights in the particular distribution of the fifty-two cards, in the problem of play or the principles of contract bridge applicable to its solution. The most that can be claimed is protection against the copying of the language used in presenting the problem." *Id.* (quoting Russell v. Ne. Publ'g Co., 7 F. Supp. 571, 572 (D. Mass. 1934)).

234 *Id.*

earlier card-game cases suggest."[235] By isolating the limiting precedents to older card games that confined themselves to traditional game forms, the court opened the door to aligning its analysis with the nascent body of video game case law in *Spry Fox* and *Tetris Holding* that had staked out greater copyright protection for games. This doctrinal move mirrored the reasoning in *Tetris Holding*, which found that the improved computing and graphical power of today's video game platforms has augmented the realm of possible expression, and thereby lifted the technological constraints that the *Amusement World* and *Epyx* courts had partly relied on in giving the merger doctrine such extensive reach.[236] In short, the *DaVinci* court's reasoning acknowledged that it was essentially breaking from prior card game precedent and relying more heavily on the reasoning in cases that extended copyright protection to games, namely *Tetris Holding* and *Spry Fox*.

The *DaVinci* court began its substantial similarity analysis by referring to the *Tetris Holding* court's finding that expression related to a game rule or game function may be protectable.[237] Relying on the *Tetris Holding* court's suggestion that such expression may still be fair game for copyright, the *DaVinci* court stated that ZiKo may have still infringed DaVinci's copyright even though the game labels and artistic elements of the game were dissimilar.[238] The court declared that the similar uses of life points between *Bang!* and *LOTK*, the distance between players, the action cards, and rewards and punishments did not amount to actionable copying because those elements constituted the rules of play.[239] The court then turned its attention to the crux of its substantial similarity analysis: the characters and the player roles in *Bang!*[240] The court noted that stock characters are not protected by copyright law.[241] The court also noted that the corresponding characters in *Bang!* and *LOTK*, like "Calamity Janet," have substantially similar capabilities, differing only in name and artwork, which had shifted from the Wild West to an ancient Chinese theme.[242] The court found that the *Bang!* characters were "distinctly marked and . . . sufficiently defined and described to be entitled to copyright protection" and

235 *Id.* (emphasis added).

236 Tetris Holding, LLC v. Xio Interactive, Inc., 863 F. Supp. 2d 394, 412 (D.N.J. 2012).

237 *See DaVinci*, 2014 WL 3900139, at *8 ("The [*Tetris Holding*] court emphasized that merely because rules, standing alone, are not copyrightable, does not mean, and cannot mean, that *any and all expression* related to a game rule or game function is unprotectible.").

238 *Id.*

239 *Id.*

240 *Id.* at *8-9.

241 *Id.* at *8.

242 *See id.* at *9 (noting that DaVinci specifically alleged that seven *LOTK* characters were copies of *Bang!* Characters).

that "[t]he capabilities [that were] part of each character's 'attributes and traits' . . . [were] protectable with the characters' names and visual depictions."[243]

The court analogized to the *Capcom* court's analysis of character similarity. *Capcom* found that the defendant's game had copied the distinctive fighting style and appearance of three characters and five special moves in *Street Fighter II*, noting that these characters and moves were protected under copyright law, but ultimately ruled against the plaintiff because the merger and scènes à faire doctrine foreclosed most of the game from protection.[244] The *DaVinci* court used a similar analysis, but by applying the merger and scènes à faire doctrines differently, came to a different result. The *DaVinci* court found that "[t]he character elements [in *Bang!* were] similar to the character elements that were found protectable in *Capcom*, and distinguishable from those that were unprotectable."[245] Some of the *Capcom* characters, such as stock characters for karate games and their special moves, were not able to be protected under copyright law because they were "based on real wrestling moves."[246] No doubt, the *DaVinci* court could have similarly held that because the *Bang!* characters were derived from Wild West models they too were not protectable under the scènes à faire doctrine. The court instead held that the *Bang!* characters, including their visual characteristics and their capabilities within the game, constituted *original expression* of the western tropes upon which they were based.[247] The court therefore determined that a reasonable factfinder could conclude that the characters in *Bang!* and *LOTK*, in spite of their graphical and thematic differences, were nonetheless substantially similar.[248]

The court conducted a separate analysis for whether the player roles in *Bang!*—Sheriff, Deputy, Outlaw, and Renegade—were also protectable. The court began by noting that "such roles and their expression are not merely rules that prescribe *what* the players may do; the roles and their expression also describe *how* the players may do it."[249] If the roles described players' interactions in sufficiently creative or original manners, then they would be eligible for copyright protection.[250] In its analysis the court relied almost entirely on the reasoning in *Spry Fox*.[251] The court noted that *Triple Town*'s object hierarchy was found to be a copyrightable element of expression, and that substantial similarity was plausible despite significant visual differences

243 *Id.*
244 *See supra* notes 171–77 and accompanying text.
245 *DaVinci*, 2014 WL 3900139, at *10.
246 *Id.*
247 *Id.*
248 *Id.*
249 *Id.*
250 *Id.*
251 *Id.*

between *Triple Town* and *Yeti Town*.[252] Relying on the *Spry Fox* court's reasoning, the *DaVinci* court found that the players' roles in *Bang!* were distinguishable from game rules.[253] As a result, the court found that "[t]he descriptions of the roles express the underlying creative idea that is the essence of *Bang!* Just as the progression from grass to bush to tree to hut was protectable expression in *Spry Fox*, so the interplay between the Sheriff, Deputies, Outlaws, and Renegades is protectable expression here."[254] The court further ruled that the merger doctrine would not preclude protection for player roles. Implicitly evoking the *Tetris Holding* decision,[255] the court found that "[t]here [were] nearly infinite ways of expressing the concepts of player elimination or a contest between authorities and their opponents."[256] *LOTK* could have chosen a different way to express those concepts, but instead copied protectable elements of *Bang!* Finding that "the characteristics and manner in which the characters interact, not merely the names and pictures used to depict them, are creative and expressive elements in a roleplaying game and are protectable," the court held that ZiKo had plausibly infringed DaVinci's copyright.[257]

D. *Summary and Conclusions*

Together, the *Tetris Holding*, *Spry Fox*, and *DaVinci* cases represent a potential change in how courts define the idea–expression divide not just in video games, but in games of all types. Of course, the argument that these cases effect a paradigm shift in video game copyright comes with several caveats. All three cases were decided at the trial court level; thus far, no appellate court has approved, adopted, or otherwise ruled on these modified approaches to the merger and scènes à faire doctrines, nor on the notion that technological advancements have widened the space between idea and expression in video games in a way that reduces the role of the merger doctrine.[258] Furthermore, only the *Tetris Holding* case actually found that the defendant had infringed the plaintiff's copyright; *Spry Fox* and *DaVinci* simply denied the defendants'

252 *Id.*

253 *Id.* at *11.

254 *Id.*

255 *See* Tetris Holding, LLC v. Xio Interactive, Inc, 863 F. Supp. 2d 394, 411 (D.N.J. 2012) ("There are many ways Xio could have expressed these same concepts [inherent in the idea of *Tetris*]."); *id.* at 413 ("Xio was free to program a puzzle game with the playing field designed in an almost unlimited number of ways . . . .").

256 *DaVinci*, 2014 WL 3900139, at *11.

257 *Id.*

258 As of a search conducted on Westlaw on March 19, 2016, *Tetris Holding* had been cited in six U.S. District Court cases, *Spry Fox* had been cited in four U.S. District Court cases, *DaVinci* had yet to be cited by another court, and none of these three cases had been cited by an appellate court.

motions to dismiss, and in *DaVinci* the court was not sufficiently confident in the plaintiff's likelihood of success to issue a preliminary injunction.[259]

Nonetheless, the combined effect of these three cases within the past few years is fairly extraordinary. These cases appear to show courts' increasing awareness of the problem of video game cloning and that courts have devised a means of distinguishing current gaming clones from the copies in *Amusement World*, *Epyx*, and *Capcom*. Although this shift was evidently the result of changes in the mobile gaming industry, *DaVinci* indicates that it could affect copyright outside of video games. By claiming that technological advancements (or, in the case of *Bang!*, breaking away from fifty-two-card deck restraints) open up new ground for creative expression in video games, these cases allow judges to recalibrate the policy levers of the merger and scènes à faire doctrines and apply both more narrowly to existing works. In emphasizing the expanded creativity and forms of expression that increased computer and graphical capabilities allow, courts can apply the limiting doctrines more lightly than *Amusement World* and its progeny. The result is a much deeper scrutiny of cloned games.

However, a valid concern about such a significant shift in copyright towards greater protection for original games and more probing analysis of their copies and copiers is that the legal regime might flip from overprotecting clone games to overprotecting their antecedents. Such a change could arguably increase fears of litigation and discourage developers from engaging in bona fide innovation based off of existing game ideas.

While such a reversal could hypothetically occur, there are substantial reasons to believe it will not. Under the *Tetris Holding* / *Spry Fox* / *DaVinci* regime, as under *Amusement World*, clone games that contain sufficient original expression of their own remain properly copyrightable in themselves.[260] Additionally, while the emerging copyright regime for video games appears to change the manner and extent to which the limiting doctrines are applied by expanding the realm of protectable expression, it certainly does not do away with those doctrines altogether. The video game copyright regime continues to emphasize the idea–expression dichotomy. Finally, the emerging regime does *not* alter the basic substantial similarity analysis in a copyright infringement claim. Although courts will need to adjust how they apply the limiting doctrines, courts can continue to analyze and compare the remaining expressive elements as before. Therefore, while the approaches in the *Tetris Holding*, *Spry Fox*, and *DaVinci* cases will expand the realm of protectable expression in video games, they should continue to protect the vital ability of game studios to creatively iterate and innovate.

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259 *DaVinci*, 2014 WL 3900139, at *13.

260 *See* U.S. COPYRIGHT OFFICE, *supra* note 84, § 807.5 (citing Atari Games Corp. v. Oman, 979 F.2d 242, 254 (D.C. Cir. 1992) for the premise that audiovisual works, like video games, must only contain a sufficient amount of original and creative human authorship to be copyrightable).

IV. *THREES*: A CASE STUDY IN CLONING

If courts have signaled a willingness to apply more scrutiny to clone cases, we can expect divergent results in the ways in which they address new scenarios of cloning in the mobile gaming space going forward. Accordingly, this Part aims to compare how one recent high-profile case of cloning may have played out under the video game copyright regime as it existed before 2012 and how it *might* play out under a copyright regime modified by the trio of post-2012 cases discussed in Part III.

The game *Threes* presents a paradigmatic example of mobile game clones harming original indie development, and how a modified copyright regime may provide a remedy. In February 2014, the three-person indie developer Sirvo released *Threes* on the Apple App Store for $1.99 after spending 14 months developing and perfecting the game.[261] *Threes* challenges players to slide and merge tiles to create larger-numbered tiles, incorporating Sudoku-like elements.[262] The game takes its name from its play tiles, most of which are multiples of the number three.[263] The execution of this idea is elegant, and the result is an addictive, satisfying diversion that works well for mobile gaming.[264] The gaming press praised *Threes* at the time of its release and it was widely downloaded.[265]

Sirvo priced *Threes* at $1.99 to recoup the cost of developing the game more quickly.[266] By charging for the game, however, Sirvo created an opportunity for another developer to clone *Threes*, sell it for free, and profit from advertising revenue.[267] As Sirvo recounts on its website in a "Letter to the Rip-Offs," a clone of its game called *1024* was released on the App Store 21 days after *Threes*.[268] *1024* used the same tile sliding, matching, and merging dynamics as *Threes*, but employed multiples of two instead of three, a different graphical scheme, and a new mechanic of placing barriers on the field of play.[269] Its description on the App Store laid bare its motivation to attract players who

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261 Vollmer & Wohlwend, *supra* note 7; *see also* Juli Clover, *Minimalistic Puzzle Game 'Threes' from Developer of 'Puzzlejuice' Now Available*, MACRUMORS (Feb. 6, 2014, 3:01 PM), http://www.macrumors.com/2014/02/06/threes-for-ios [https://perma.cc/82PF-HAQ3].

262 Clover, *supra* note 261.

263 *Id.*

264 Eli Hodapp, *'Threes!' Review—Checking the Boxes of a Perfect Mobile Game*, TOUCHARCADE (Feb. 6, 2014, 1:10 PM), http://toucharcade.com/2014/02/06/threes-review [https://perma.cc/85RU-F8KW].

265 *See, e.g.*, *id.* (labeling *Threes* "about as close as it gets to a perfect mobile game").

266 *Id.*

267 *See* Sarah Perez, *Clones, Clones Everywhere—"1024," "2048" and Other Copies of Popular Paid Game "Threes" Fill the App Stores*, TECHCRUNCH (Mar. 24, 2014), http://techcrunch.com/2014/03/24/clones-clones-everywhere-1024-2048-and-other-copies-of-popular-paid-game-threes-fill-the-app-stores [https://perma.cc/4J5Y-MGQV] ("'Threes' was a paid game . . . which meant there was room for another, perhaps less scrupulous developer, to come in and fill a gap by addressing a free-to-play audience.").

268 Vollmer & Wohlwend, *supra* note 7.

269 *Id.*

might otherwise play *Threes*: "No need to pay for ThreesGames [sic]. This is a simple and fun gift for you, and it's free."[270]

1024 was followed ten days later by its own clone, *2048*,[271] which was also available for free and which caught fire with consumers, garnering millions of downloads.[272] On March 24, 2014, less than two months after *Threes* had released, *TechCrunch* reported,

> There are now over two-dozen variations of the "2048" game [on the Apple App store], as well as other games stuffing the term "2048" into their title or game's description in hopes of being surfaced in the search results. There are also a few other "1024's," plus spin-offs involving 8's or 5's instead of 3's or 2's.[273]

Adding insult to injury, some began to mistakenly label *Threes* a clone of *2048*.[274]

As one industry commenter noted, "*Threes* has been successful . . . but *2048* has become a pop culture phenomenon."[275] While *Threes* managed to hold on to a top spot in the puzzle section of the App Store, the *2048* clone, and *its* clones, turned *Threes*' basic idea into runaway success. Sirvo later took its case to the public, publishing hundreds of archived emails on its website which showed the many design and conceptual challenges that its developers spent a year surmounting.[276] In spite of being prolifically cloned, *Threes* has received widespread recognition and acclaim, winning an Apple Design Award in 2014[277] and Apple's iPhone Game of the Year.[278] Still, as Sirvo's website makes clear, the studio is both incensed by how quickly clone developers appropriated its work, and aware of the earnings it could have received had players not satisfied themselves with a free iteration of its game.[279]

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270 Perez, *supra* note 267.

271 Vollmer & Wohlwend, *supra* note 7.

272 Chad Sapieha, *Cracking the Secret of 2048*, CONNECTED (Sept. 25, 2014), http://www.connectedrogers.ca/apps/cracking-the-secret-of-2048 [https://perma.cc/EN2C-D7ME].

273 Perez, *supra* note 267.

274 *See* Vollmer & Wohlwend, *supra* note 7 (addressing frustration caused by people who believed *Threes* was a clone of *2048*).

275 Jason Schreier, *2048's Massive Popularity Triggers Cloning Controversy*, KOTAKU (Mar. 31, 2014, 6:00 PM), http://kotaku.com/2048s-massive-popularity-triggers-cloning-controversy-1555599216 [https://perma.cc/62RK-4KP2].

276 Vollmer & Wohlwend, *supra* note 7.

277 Roman Loyola, *WWDC: Apple Design Award Winners for 2014*, MACWORLD (June 2, 2014, 6:30 PM), http://www.macworld.com/article/2358481/wwdc-apple-design-awards-winners-for_2014.html [https://perma.cc/EM4N-MPNP].

278 *See* Crecente, *supra* note 54 ("[O]ne of the finest number puzzlers we've ever played, this little game is big on charm and clever concepts. Immensely thoughtful design makes *Threes!* instantly appealing and nearly impossible to put down." (quoting Apple)).

279 *Threes!* is now available on the App Store for two different prices. One version retails for $2.99 instead of the initial price of $1.99, perhaps reflecting greater willingness to pay by consumers after the game won Apple Game of the Year 2014. Tellingly, a second version of the game now retails for free by virtue of being supported by ad revenue. *See Threes!*, ITUNES PREVIEW (last updated

A. *Video Game Copyright, 1981–2012*

Although Sirvo did not pursue legal action, could it have succeeded in a copyright infringement claim against *1024*, *2048*, and its other clones? Under the *Amusement World* analysis, almost certainly not. A court faced with this case would first identify the unprotectable ideas underlying the game *Threes*. A court might consider the basic idea of *Threes* to be a matching game involving tiles that merge together and grow greater in number, in which case a court would likely find that the similar elements present in *Threes*, *1024*, and *2048* were required by this basic idea. A court would then emphasize, as the *Amusement World* court did, the distinctions between the original and infringing works, such as the different numbering scheme for the tiles in *Threes* compared to *1024* and *2048*, the different shapes and colors of the tiles, and different animations for sliding the tiles. These differences would likely prove sufficient to defeat a copyright infringement claim. In summary, a court operating under the *Amusement World* paradigm would likely view *Threes* as a fairly pure representation of abstract game mechanisms and concepts, and therefore warranting thin protection.

B. *Video Game Copyright After* Tetris Holding*,* Spry Fox*, and* DaVinci

Threes would have a stronger copyright infringement claim against its clones under *Tetris Holding*, *Spry Fox*, and *DaVinci*—but to claim it is likely to win such a case overstates the recent doctrinal shift. Under the *Tetris Holding* approach, the court could discount any application of scènes à faire as not applying to an abstract puzzle game like *Threes*. In regards to the merger doctrine, as in *Tetris Holding* the court could define the idea of the game narrowly, and envision the existence of a number of alternative ways of expressing the idea. A court's willingness to protect a completely abstract game like *Tetris* indicates that a game like *Threes* could be protectable. Following in the precedent of *Spry Fox*, the court could also consider the views of online bloggers, who have uniformly acknowledged that *1024*, *2048*, and their progeny are opportunistic clones of *Threes*.

Still, two elements render *Threes* more difficult to protect than *Tetris*. First, and most importantly, while *Threes*' clones are readily recognizable for mimicking the game's mechanics, they are more visually distinct from *Threes* than the offending clone *Mino* was from *Tetris*. Although this would not necessarily defeat protection, some commenters on *Tetris Holding* have expressed concern that even rudimentary visual distinctions between *Tetris* and *Mino*

Dec. 22, 2015), https://itunes.apple.com/us/app/threes!/id779157948?mt=8 [https://perma.cc/VBL6-FBSL]; *Threes! Free*, ITUNES PREVIEW (last updated Dec. 29, 2015), https://itunes.apple.com/us/app/threes!-free/id976851174?mt=8 [https://perma.cc/5648-793U].

could have defeated a finding of substantial similarity.[280] This worry is in part allayed, however, by the subsequent rulings in *Spry Fox* and *DaVinci* that found plausible copying even where cloned games looked markedly different from their antecedents.

Second, a court might find that some elements of *Threes*, such as its grid and its numbering system, are functional, which is how the *Spry Fox* court interpreted the play grid in *Triple Town*. However, that could still leave a number of elements available for protection. In sum, while success on the merits for *Threes* would be far from certain, the company could mount a plausible claim of copyright infringement under the *Tetris Holding*, *Spry Fox*, and *DaVinci* precedents, perhaps enough to defeat a motion to dismiss and put settlement pressure on its clones.[281]

V. THE ROLE OF VIDEO GAME DEVELOPERS

Indie developers who lack access to legal counsel and large marketing budgets are less likely than major publishers to know the protections (or lack thereof) they have through copyright. Similarly, developers' ability to promote games heavily enough to overcome cheap clones is limited. In the rough and tumble space of mobile game development, small studios are at risk of having their original works quickly buried among copiers. As the makers of *Threes* lamented, in mobile gaming, "[A]ll these ideas can happen so fast nowadays that it seems tiny games like *Threes* are destined to be lost in the underbrush of copycats, me-toos and iterators."[282]

The marketplace for mobile video games does not need to operate this way, nor should it. For copyright to fulfill its purpose of encouraging the creation of new works, which in turn benefit the public as a whole, a new paradigm is required. A more optimized video game copyright regime would restructure

280 *See* Casillas, *supra* note 63, at 169 ("Even though the judge granted copyright protection to many of the relatively basic elements of *Tetris*, Xio still could have maneuvered around the copyright protections with some relatively simple changes to *Mino*." (citations and quotations omitted)).

281 Importantly, clone games that contain sufficient original expression and that are distinguishable from their antecedents would still properly receive protection from copyright infringement claims under the *Tetris Holding* / *Spry Fox* / *DaVinci* regime, just as they have under *Amusement World*. For instance, the wildly popular game *Angry Birds* is a clone of the pre-existing online game *Crush the Castle*, from which it lifted its hallmark physics-based gameplay and other game mechanics. *See* Harshal Desai, *Module: Psychology of Design Assignment 2: Angry Birds "Crushed" the Castle* 3 (June 12, 2011), http://www.slideshare.net/hersheydesai/harshal-desai-assignment-2-report [https://perma.cc/7WLH-XQLG]. However, *Angry Birds* layered a different art style, a standalone storyline, and numerous gameplay tweaks upon *Crush the Castle*'s basic idea to create greater complexity and broader appeal. These additions provided substantially new, original expression. A court applying *Tetris Holding*, *Spry Fox*, and *DaVinci* would find some copied elements but would be very unlikely to find substantial similarity.

282 Salvador Rodriguez, *Makers of 'Threes' Call '2048' A Broken Clone*, L.A. TIMES (Mar. 28, 2014, 10:03 AM), http://www.latimes.com/business/technology/la-fi-tn-threes-2048-broken-clone-20140328-story.html [https://perma.cc/4ACM-6G33].

the incentives and protections of the industry to avoid rewarding clone developers at the expense of bona fide innovators. An optimized video game copyright regime must embrace the *Tetris Holding*, *Spry Fox*, and *DaVinci* reinterpretations of the limiting doctrines as they apply to video games in order to grant them greater protections. A clear doctrinal shift in how courts apply copyright law to video games would, if backed by enough cases finding substantial similarity (or at least denying defendants' motions to dismiss and motions for summary judgment), impact the incentive structure for clone developers. If a clone developer thinks that she faces a tangible risk of copyright infringement litigation with the commensurate costs of defending against such litigation and the possibility of potential significant damages, she may be discouraged from cloning and perhaps encouraged to produce original gaming content instead.

There is also a role for indie gaming developers to play in the fight against cloned games. First, when indie game developers create new premises and mechanics, they should take conscious steps to infuse their software with unique expression in order to make their works more protectable. As *Tetris Holding*, *Spry Fox*, and *DaVinci* demonstrate, courts are willing to view the creative elements of a game as expressive, separate and apart from the underlying game mechanics, but that finding is made easier if developers invest more in developing that expression. Second, indie developers, like Sirvo, must approach the mobile gaming space with a realistic sense of what sorts of games are more or less protectable, and adopt marketing practices that enable them to more quickly monetize a game that will be cloned. Puzzle games like *Threes* consist of more limited expressive elements than roleplaying or other games, whose storylines and unique elements offer more "traditional" forms of expression. Furthermore, a puzzle game like *Threes* is far more easily replicated than a complex roleplaying game that has extensive bespoke art assets.[283] Consequently, an indie team that has stumbled upon the next great puzzle idea—like *Threes*, or the original *Tetris*—must carefully consider what will happen once that idea is released to the public. If the game becomes popular, clones will follow. The studio can invest additional development time in layering more expressive elements into the game and making the game an original iteration of a more basic idea, thus strengthening a claim for copyright protection. Alternatively, the studio can make a strategic choice to release its game for free to crowd out potential competitors more quickly, ensuring that the tide of clones does not bury it with free versions of the same game idea before the original has a chance to consolidate public interest and build a user base.

283 For example, Gabriele Cirulli, a nineteen-year-old Italian developer who created the version of *2048* that rocketed the game to popularity posted the source code for his game to GitHub, a software development site. This posting let others access, copy, and customize his code, essentially allowing them to easily make additional clones of *2048* and, by extension, *Threes*. *See* Perez, *supra* note 267.

Conclusion

Video games have become an indelible part of our culture and our day-to-day lives, a role that will only continue to grow in salience and complexity as the medium develops. Mobile gaming in particular represents an immensely innovative and dynamic sector of the video game industry. But increased ease of development has also aided the proliferation of clone games, which threaten to mislead consumers and deter new developers from developing for mobile platforms, for fear that their hard work will be stolen out from underneath them. Although game developers have long accepted that copyright law would play a negligible role in protecting their original creations, the *Tetris Holding*, *Spry Fox*, and *DaVinci* cases demonstrate a judicial awareness of the importance of mobile gaming and the need to preserve artistic integrity within the space by stopping the practice of widespread cloning. While the rebalancing of video game copyright doctrine has yet to receive the approval of appellate courts, there is hope that lower courts will continue to develop this distinctive body of case law. In the process, these courts can communicate to clone developers that copying may no longer escape the reach of copyright law.