

# LEVELING PAINS: CLONE GAMING AND THE CHANGING DYNAMICS OF AN INDUSTRY

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In May of 2009, Xio Interactive, Incorporated, a small company formed by recent college graduate Desiree Golden, released a video game called *Mino* for what was then the iPhone OS operating system.<sup>1</sup> Within a few months, Xio released a second version of the game called *Mino Lite*.<sup>2</sup> According to accompanying descriptive text published with the game listings, the two games had much to recommend them: a variety of input control options, an original musical score, two standard play modes, mobile multi-player connectivity, and even social chat rooms where players could discuss strategy or watch games in progress.<sup>3</sup> Description of the actual game play, however, was sparse; *Mino* was summed up as simply a “Tetromino game” with “fast-paced, line-clearing features.”<sup>4</sup> And at the very bottom of the description came a disclaimer: “Mino and Xio Interactive are not affiliated with Tetris (tm) or the Tetris Company (tm).”<sup>5</sup>

This disclaimer, of course, helps explain why further description of the game-play was unnecessary—and also what would happen next. To anyone with even casual familiarity with video game history, the screen shots and descriptions, sparse as they were, made it immediately apparent that *Mino* had deep similarities to *Tetris*, the wildly popular puzzle game that has sold millions of units on various gaming platforms since it was originally published in the 1980s.<sup>6</sup> How similar, exactly, soon became a question of law,

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1. See *Tetris Holding, LLC v. Xio Interactive, Inc.*, 863 F. Supp. 2d 394, 397 (D.N.J. 2012). The iPhone OS was renamed to iOS with the release of version 4.0 in June of 2010. David Chartier, *iPhone OS Gets New Name, Video Calling*, MACWORLD (June 7, 2010, 11:56 AM), [http://www.macworld.com/article/1151812/iphone\\_os\\_4\\_wwdc.html](http://www.macworld.com/article/1151812/iphone_os_4_wwdc.html).

2. *Tetris Holding*, 863 F. Supp. 2d at 397.

3. Because of subsequent litigation, the two games have been removed from the iTunes App Store, where they were originally sold. See *id.* This text is taken from the website 148apps.com, which maintains listings for the games for archival purposes. *App Detail – Mino*, 148APPS, <http://www.148apps.com/app/315238201> (last visited Dec. 18, 2012).

4. *Id.*

5. *Id.*

6. About Tetris, TETRIS HOLDING, LLC, <http://www.tetris.com/about-tetris/index.aspx> (last visited Dec. 18, 2012).

as Tetris Holding, LLC (“Tetris, LLC”), the company that manages the licensing of Tetris, sent a takedown notice under the Digital Millennium Copyright Act to the iTunes App Store, where the game was sold.<sup>7</sup> Shortly thereafter, pursuant to the App Store’s policy at the time that applications would not remain taken-down unless a lawsuit had been filed, Tetris, LLC filed a lawsuit alleging copyright and trademark infringement by Xio.<sup>8</sup> In May of 2012, the district court of New Jersey granted summary judgment in favor of Tetris, LLC.<sup>9</sup> So ended the short life of Xio Interactive.

But the story of Ms. Golden, Xio, and *Tetris* is far from unique. Rather, it represents one of the most recent examples of the trend of copyright litigation currently resonating throughout the video game industry. This trend, dubbed the “Clone Wars” in popular media and scholarship,<sup>10</sup> brings into focus once more the limitations of copyright law when it comes to the protection of software. Copyright law’s approach to clones, such as the one Ms. Golden’s company was found to have produced, is far from groundbreaking; over time, many commentators have acknowledged that the exact scope of copyright in software should remain narrow and fact-specific by necessity, in order to allow courts to strike the proper balance between protections that are too thin to properly incentivize innovation on one side, and protections that are too thick to permit further innovations on the other.<sup>11</sup>

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7. *Tetris Holding*, 863 F. Supp. 2d at 397.

8. *Id.*

9. *See id.* at 396.

10. *See, e.g.*, Simon Parkin, *Clone Wars: Is Plagiarism Killing Creativity in the Games Industry?*, GUARDIAN (Dec. 23, 2011), <http://www.guardian.co.uk/technology/gamesblog/2011/dec/21/clone-wars-games-industry-plagiarism>; Erik Kain, *Clone Wars: Zynga vs. EA and the Baffling Laziness of Copycat Games*, FORBES (August 10, 2012), <http://www.forbes.com/sites/erikkain/2012/08/10/clone-wars-zynga-vs-ea-and-the-baffling-laziness-of-copycat-games/>; Shaun Spaulding, *Indie Video Game Developers: The Clone Wars*, HEAVY TARGETS, <http://www.heavytargets.com/copyright-law/indie-video-game-developers-the-clone-wars/> (last visited Feb. 2, 2013). While “cloning” has been used in the copyright infringement context for years, the term “Clone Wars” itself was actually popularized by George Lucas’ *Star Wars* film franchise, most notably the film *STAR WARS: EPISODE II—ATTACK OF THE CLONES* (20th Century Fox 2002) and the spin-off animated series *STAR WARS: CLONE WARS* (Cartoon Network Studios 2003). 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.

11. *See, e.g.*, Peter S. Menell, *Envisioning Copyright Law’s Digital Future*, 46 N.Y.L. SCH. L. REV. 65–66 (2002–2003) (“Copyright law provides a thin layer of protection for computer software . . . .”); Pamela Samuelson, Randall Davis, Mitchell D. Kapor, & J.H. Reichman, *A Manifesto Concerning the Legal Protection of Computer Programs*, 94 COLUM. L. REV. 2308, 2360

What makes the not-so-curious case of Ms. Golden noteworthy is the video game ecosystem it emerged from, and what that ecosystem suggests about the role that copyright law can play when presented with rapidly evolving information distribution technologies. Changing dynamics in the video game industry have eliminated many of the mechanisms that would have prevented potentially infringing clones from making it to market, and the increasingly digital video game marketplace has granted access to a larger number of developers than ever before. Without traditional gatekeepers to the marketplace—such as brick-and-mortar retailers and hardcopy distributors—copyright law has been forced into a more reactive posture. Put another way, a gaming industry copyright attorney cannot keep a clone off the shelves because the shelves have gone digital, and the processes for filling them are increasingly automated.<sup>12</sup> While the specter of infringement litigation still hangs over any developer whose game, like Xio's, comes too close to an existing product, this threat is increasingly a symbolic one, acted out through distribution platform takedown notices and settlement negotiations.<sup>13</sup>

This Note describes contemporary issues in software copyright through the lens of the video game industry's so-called Clone Wars. Doing so will not only provide a greater understanding of the changing dynamics of the video game industry, but also suggest how copyright protection for software more generally can continue to adapt to the digital information age. Part I outlines the current state of the video game industry with a particular eye toward how new developments have created an ecosystem that is particularly fertile for cloning. Part II describes copyright law's approach to protecting software. Part III discusses takedown procedures on some of the most significant video game distribution platforms. Part IV examines how all these factors play out in practice by examining several case studies that are representative of the dominant categories of litigation. Part V offers some concluding thoughts on what can be learned from the Clone Wars that may have broader applications to the wider scope of copyright law.

## I. THE NEW VIDEO GAME ECOSYSTEM

While the pertinent copyright law for clone gaming remains relatively settled, the video game industry itself is in a state of flux. New distribution models, increased accessibility to the marketplace, and a boom in mobile and

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(1994) (citing the Second Circuit's decision in *Computer Associates International, Inc. v. Altai Inc.* as "turn[ing] the tide" away from an improperly broad approach).

12. See discussion *infra* Part I.

13. See discussion *infra* Part III.

social gaming have created a rapidly changing environment that is particularly fertile for clone developers. This Part discusses the changing demographics and economics of the industry, the growth of digital distribution platforms, the new styles of games being produced by these conditions, and how the cloning phenomenon fits in.

A. THE NEW VIDEO GAME MARKETPLACE

It has become a cliché to say that information travels more quickly today than ever before, but it remains true nonetheless.<sup>14</sup> The proliferation of high speed wireless internet allows people to access the large volumes of data necessary to run complicated programs—like video games—from their computer, tablet, or phone wherever they might be, whenever they might choose to do so. The ubiquity of mobile connectivity on devices that need not be wholly devoted to gaming—most notably smart phones and, more recently, tablets—is in the process of revolutionizing the industry. The days when the video gaming industry could be discussed purely in the context of console gaming or arcade machines are long over.

Like many other forms of commerce, the video game economy is going largely online. One market study suggests that online distribution of video games could surpass retail sales as soon as this year.<sup>15</sup> One of the largest online distribution hubs, Apple's iTunes App Store, receives well over 100 new applications a day from would-be game developers seeking to distribute their products on the iTunes marketplace.<sup>16</sup> New video game developers spring up daily, both in the form of small indie shops and well-heeled investors; in 2011 consumers spent over sixteen billion dollars on video games.<sup>17</sup> This number actually represents a small decline from 2010, but that

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14. See, e.g., Menell, *supra* note 11, at 109–11 (“[M]ore efficient file formats and compression technology reduce the memory capacity and bandwidth necessary to access and store such content”); Terrence O’Brien, *How Fast Information Travels, From 1805 Until Today*, SWITCHED (Sept. 6, 2009), <http://www.switched.com/2009/09/06/the-speed-of-information-over-the-last-200-years> (analyzing a chart comparing how quickly news of global events reached London over time); see generally Dale N. Hatfield, *The Challenges of Increasing Broadband Capacity*, 63 FED. COMM. L.J. 49 (2010–2011) (discussing the technical challenges posed in meeting contemporary demands for broadband services).

15. James Brightman, *Online Game Sales to Surpass Retail by 2013, Total Worldwide Game Sales at \$81 Billion in 2016 – DFC*, INDUSTRYGAMERS (Sept. 7, 2011), <http://www.industrygamers.com/news/online-game-sales-to-surpass-retail-by-2013-total-worldwide-game-sales-at-81-billion-in-2016---dfc>.

16. App Store Metrics, 148APPS.BIZ, (Sept. 2012), <http://148apps.biz/app-store-metrics/?mpage>.

17. This number comes from the NPD Group Industry report for the 2011 year. NPD's monthly sales figures are the most cited economic indicators for the industry. See *2011 Total Consumer Spend on All Games Content in the U.S. Estimated Between \$16.3 to \$16.6*

can likely be attributed to the sluggish hardware sales that typically follow at the end of the console cycle.<sup>18</sup>

One crucial characteristic of the changing video game marketplace is demographic expansion. In 2012, the Entertainment Software Association (“ESA”), an industry organization that caters to the business and public affairs needs of video and computer game publishers, released its annual demographic survey of the industry.<sup>19</sup> This study found that the average age of gamers is thirty years old, that 68% of gamers are over eighteen, and 47% are women.<sup>20</sup> These statistics suggest that several of the unfair stereotypes that society has attached to gamers—the pimply-faced teenager, for example, or the disaffected loner—do not have even the most basic claims to validity today.<sup>21</sup> Meanwhile the youth and console markets remain strong—a separate study conducted by the NPD Group in 2011 found that a remarkable 91% of children aged two to seventeen played games of some kind. Much of this demographic expansion can be attributed to the growth of multi-purpose mobile platforms, most notably smart phones and tablets.<sup>22</sup> It makes intuitive sense that an adult with no prior history of gaming would be more likely to spend ninety-nine cents purchasing Fruit Ninja<sup>23</sup> for the iPhone he already owns than he would be to invest upwards of \$200 on an Xbox 360 and games<sup>24</sup>—let alone purchase an Atari 2600 for a comparable price in 1977 dollars.<sup>25</sup>

A second characteristic of the broadening video game marketplace dovetails along with the demographic expansion: the rise of social

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*Billion*, PRESS RELEASE NPD GROUP, (Jan. 12, 2012), [https://www.npd.com/wps/portal/npd/us/news/press-releases/pr\\_120116/](https://www.npd.com/wps/portal/npd/us/news/press-releases/pr_120116/).

18. *Id.*; see also Jeff Taylor, *NPD Games Sales: Not the Full Story*, SEEKING ALPHA, (Apr. 6, 2012) <http://seekingalpha.com/article/482571-npd-game-sales-not-the-full-story> (offering a more in-depth look behind the sales numbers).

19. *2012 Essential Facts About the Computer and Video Game Industry*, Electronic Software Association, <http://www.theesa.com/facts/gameplayer.asp> (last visited Dec. 19, 2012).

20. *Id.*

21. For an examination—and dismissal—of the stereotype of the gamer as antisocial loner through the context of a sociological study of players of the MMO EverQuest 2, see Dmitri Williams, Nick Yee, and Scott E. Caplan, *Who Plays, How Much, and Why? Debunking the Stereotypical Gamer Profile*, 13 J. COMPUTER-MEDIATED COMM. 993 (2008).

22. *The Video Game Industry is Adding 2–17 Year-Old Gamers at a Rate Higher Than That Age Group’s Population Growth*, PRESS RELEASE NPD GROUP, (Oct 11, 2011), [https://www.npd.com/wps/portal/npd/us/news/press-releases/pr\\_111011/](https://www.npd.com/wps/portal/npd/us/news/press-releases/pr_111011/).

23. Fruit Ninja by Halfbrick Studios, iTUNES PREVIEW, <https://itunes.apple.com/us/app/fruit-ninja/id362949845?mt=8> (last updated Dec. 19, 2012).

24. Xbox 360, MICROSOFT STORE, <http://www.microsoftstore.com/store/msstore/cat/categoryID.50606600> (last visited Nov. 5, 2012).

25. Atari 2600 History, ATARI AGE, <http://www.atariage.com/2600/index.html?SystemID=2600> (last visited Nov. 5, 2012).

networking. That same 2012 ESA study noted that 62% of gamers now play multi-player games, while 33% play social games and another 33% play on smart phones.<sup>26</sup> Social network gaming and mobile gaming are widely considered to be two of the major future growth sectors of the industry. An estimated 70% to 80% of mobile downloads are game apps,<sup>27</sup> and one research firm suggests that the mobile gaming industry could be valued as high as \$54,000,000,000 by 2015.<sup>28</sup> Mobile and social gaming have also added a new revenue model to the gaming industry: the pay-in-game or “freemium” model.<sup>29</sup> Freemium games are available to the general public at no cost.<sup>30</sup> Instead, the games make money through the sale of premium in-game perks, items, and advantages to players via an in-game currency that can be acquired over time or purchased for real money.<sup>31</sup> Although it is only a small percentage of freemium players who actually invest real money into the games, those players that do tend to spend significant amounts.<sup>32</sup> Combined with the traditional video game revenue models—retail and subscription payments—this new business model is enabling publishers to monetize game content in more diverse and extensive ways than previously possible. When combined with a broader demographic base to draw from, these trends suggest an industry ripe with the potential for future growth, as well as continued change.

#### B. THE GROWTH OF DIGITAL DISTRIBUTION

The second key to the growth of the video game marketplace is the rise of digital distribution platforms. Historically, video game developers have been heavily reliant on physical distribution and retail sales to monetize their games. Although some early attempts were made in the 1980s and 1990s to transfer video game data across modem connections, it was not until broadband Internet became more commonplace that widespread digital

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26. See ESA, *supra* note 19.

27. Mobile Gaming is Dominating the Gaming Industry, GEEKAPHONE, (July 27, 2011), <http://geekaphone.com/blog/mobile-games-by-the-numbers/>.

28. Press Release: Mobile Entertainment Service Revenues to Reach \$54 billion by 2015 Propelled by Surge in Consumer Smartphone Adoption, JUNIPER RESEARCH, (Mar. 2, 2011), <http://juniperresearch.com/viewpressrelease.php?pr=233>.

29. See Yannick Lejacq, *Something for Nothing: How the Videogame Industry Is Adapting to a 'Freemium' World*, INT'L BUS. TIMES, (Sept. 15, 2012), <http://www.ibtimes.com/something-nothing-how-videogame-industry-adapting-freemium-world-789466>.

30. See *Freemium Gaming Metrics 2012, Casual Games Sector Report*, CASUAL CONNECT, available at <http://casualconnect.org/research-reports/> (last visited Dec. 19, 2012) (providing a more extensive breakdown of the economic model of freemium or free-to-play games).

31. See *id.*

32. See *id.*

distribution became feasible.<sup>33</sup> And, of course, the ubiquity of wireless connectivity was a necessary precursor to the explosion of mobile and social gaming.

To better understand the changes wrought by digital distribution on video game sales and subsequent infringement litigation, one can return to the story of Xio and Desiree Golden. Traditionally, the process of bringing a video game to market could be broken down into seven stages: financing, development, production, publishing, manufacturing, distribution, and retailing.<sup>34</sup> Had Ms. Golden sought to develop the exact same version of *Mino* in, say, 1994, she would first have had to pitch the game to a publisher to secure financing for the game's development and production. The publisher would then publish and market the game and then either produce and distribute the game to retailers itself or contract with a manufacturer and a distribution company.<sup>35</sup> The distribution company would then produce and distribute the game to retailers on the publisher's behalf.<sup>36</sup> Finally, the retailer would decide whether or not to purchase the game, how many units to purchase, and how aggressively to promote the games to its customers.

For a developer, this model has many drawbacks: it imposes several layers of industry players who must be convinced of the market viability of the product; it lengthens the time it takes a game to travel from development to market; and it costs money to navigate these obstacles, costs which must either be absorbed by the developer or passed on to the consumer.<sup>37</sup> The total effect of these drawbacks is to create barriers of artificial selectivity between a developer and the market for the developer's product. Gatekeepers at the publishing, distribution, and retail levels have to make independent decisions that the developer's product deserves to make it to the marketplace before it can ever test the waters.

Digital distribution has pierced that membrane and created something more closely resembling a free market. The Internet now serves as the lone intermediary for most game downloads, and several platforms have come to dominate the marketplace. Valve's Steam platform is the undisputed leader in personal computer game content.<sup>38</sup> The iTunes App Store and Google Play

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33. See Menell, *supra* note 11, at 109.

34. See KILLIAN J. MCCARTHY, MAYA FIOLET & WILFRED DOLFSMA, *THE NATURE OF THE NEW FIRM: BEYOND THE BOUNDARIES OF ORGANISATION AND INSTITUTIONS* 102 (2011).

35. See *id.*

36. See *id.*

37. See *id.* at 103.

38. In 2009, one competitor estimated that Steam had seventy percent of the PC digital downloading market share. John Funk, *Steam is 80% of PC Digital Distribution Market*, THE

are the leaders in mobile gaming technology for the iOS and Android operating systems, respectively. Finally, Facebook is the key player in the social gaming sector, while also overlapping somewhat into the mobile market. These platforms all follow their own individual protocols for reviewing prospective games, but each offers a highly desirable level of speed in bringing games to market.<sup>39</sup> A developer need only submit a game or app, and it may soon be online, available for download or purchase by potential customers. And while these platforms all charge for the privilege,<sup>40</sup> the costs to the developer are generally offset by the money saved by avoiding traditional physical distribution and the benefit of being able to deliver a new product to the consumer on a much shorter timeframe. In strict economic terms, this system also places fewer restrictions upon the marketplace; anyone with a game to sell can sell it, allowing the market more freedom to reward developers based on the superiority of their product and pricing, rather than on the arbitrary influence of distributors or retailers.

But a more open marketplace has its drawbacks. The democratizing effect of online distribution, which allows anyone to distribute a game without the need for industry connections or access to a brick and mortar distribution network, creates an ecosystem that is more difficult to police. Although the gatekeepers that once operated at the publishing and distribution levels arguably inhibited market freedom, they did serve at least one useful purpose: they could choose not to publish or distribute a game that bore the marks of unlawful cloning. While a video game distributor

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ESCAPIST, (Nov. 20, 2009), <http://www.escapistmagazine.com/news/view/96259-Steam-Is-70-of-PC-Digital-Distribution-Market>. While some suspect that Steam has lost some ground since then, it still remains the PC leader, and has announced plans to move into the hardware market with the release of a console styled PC-package. Jason Schreier, *Gabe Newell: Living Room PCs will Compete with Next-Gen Consoles*, KOTAKU, (Dec. 8, 2012), <http://kotaku.com/5966860/gabe-newell-living-room-pcs-will-compete-with-next+gen-consoles>.

39. Steam, for example, is currently transitioning from an in-house committee review process for potential game submissions to a more community-oriented approach called "Steam Greenlight." Under the Greenlight model, prospective game developers submit a small number of descriptions, screenshots, and descriptive text of their games. Then community members can "vote up" game concepts they would like to see released on the Steam platform. There is a small submission fee required, but it is primarily designed to discourage non-serious submissions; all proceeds from the submission fee go to the Child's Play charity. *See* Steam Greenlight, STEAM, <http://steamcommunity.com/workshop/about/?appid=765&section=faq> (last visited Dec. 22, 2011).

40. Apple and Google, for example, each take a 30% cut of the sale price for all apps sold over their respective platforms. *Distribute your App—iOS Developer Program*, APPLE, <https://developer.apple.com/programs/ios/distribute.html> (last visited Feb. 4, 2013); *Transaction Fees, Android Developer Help*, GOOGLE, <https://support.google.com/googleplay/android-developer/answer/112622?hl=en&> (last visited Feb. 4, 2012).



might not precisely understand the legal standards for copyright infringement, any game-savvy professional could easily look at a game like *Mino* and feel some concern that its design was simply too similar to *Tetris*. Additionally, as digital distribution allows more and more developers to access the online gaming marketplace, the need for individual parties to maintain upright, cordial relationships among one another becomes less crucial, which increases the likelihood of the kind of sharp dealing that often leads to actionable cloning.<sup>41</sup> And whereas only a handful of companies previously had access to the technological resources to design a video game, anyone with access to a basic suite of design tools can now create a product and put it in the market.<sup>42</sup> Not only does this skyrocket the raw number of developers who might potentially engage in cloning, but the disparities in size and resources between established industry players and small start-up developers create warped power dynamics that lessen the likelihood that disputes will be resolved on the actual legal merits. On one side, a start-up company designing games in a dorm room—not unlike Xio—may have little to lose from knocking off an established game property. That company may easily reach the conclusion that the short-term benefits of putting out a successful game by borrowing heavily from a known success—money, notoriety, goodwill with customers—may outweigh any long-term legal consequences. From the other side, if that same small company develops a truly innovative new game at great personal cost, it may not have the resources to pursue legal action to protect its property, whether from industry heavyweights or other small developers.

### C. REASONS FOR PESSIMISM

There are some larger trends running through the video game industry that, while not strictly related to the cloning phenomenon, can help provide context for it. Despite the broadening of the marketplace, a number of

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41. It is not uncommon for cloning litigation to arise from failed business dealings. The recent case of *6Waves v. Spryfox* offers an instructive example of this. In that case, 6Waves and Spryfox engaged in extensive talks for Spryfox to develop a version of its popular *Triple Town* game for 6Waves. Negotiations ultimately broke down, however, and shortly thereafter 6Waves released its own game, *Yeti Town*, which bore marked similarities to *Triple Town*. Spryfox filed copyright infringement charges against 6waves, and the two parties ultimately settled. See Andy Chalk, *6waves Settles Yeti Town Cloning Lawsuit*, THE ESCAPIST (Oct. 11, 2012), <http://www.escapistmagazine.com/news/view/120080-6waves-Settles-Yeti-Town-Cloning-Lawsuit>.

42. See *About the Application Development Process*, MAC DEVELOPER LIBRARY, [http://developer.apple.com/library/mac/#documentation/General/Conceptual/ApplicationDevelopmentOverview/Introduction/Introduction.html#//apple\\_ref/doc/uid/TP40011186-CH1-SW1](http://developer.apple.com/library/mac/#documentation/General/Conceptual/ApplicationDevelopmentOverview/Introduction/Introduction.html#//apple_ref/doc/uid/TP40011186-CH1-SW1) (last visited Jan. 21, 2013).

industry leaders have seen declining market valuations in the past year, suggesting concern among investors about the financial health of the industry. Zynga<sup>43</sup> has made the most headlines with plummeting stock prices since going public in December of 2011,<sup>44</sup> along with heavy layoffs through October of 2012.<sup>45</sup> Other large gaming companies like Electronic Arts<sup>46</sup> and THQ<sup>47</sup> have also lost significant market valuation. While this may be partially driven by Zynga's post-IPO problems and normal market fluctuation downward at the end of the console life cycle,<sup>48</sup> at least one commentator within the industry believes that the freemium social gaming rush may have been a bubble that is now correcting.<sup>49</sup> And just like movie studios, the fortunes of major video game developers can hinge heavily on a single successful or unsuccessful release; Electronic Arts has blamed some of its recent backslide on the disappointing results of *Medal of Honor: Warfighter*,<sup>50</sup> while Zynga has seen a noticeable uptick in its fortunes thanks to the success of *Farmville 2*.<sup>51</sup> Still, it is worth noting that while the marketplace as a whole may be expanding, that expansion has brought with it significant upheaval. Although the future of the industry as a whole looks strong, how well the industry's current players adjust to the new market conditions remains to be seen.

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43. Zynga is a common party to cloning litigation, both as plaintiff and as defendant. See *infra* Section IV.3.

44. All stock valuation data was taken from Google Finance. NASDAQ:ZNGA, Zynga, Inc., GOOGLE FINANCE, <http://www.google.com/finance?cid=481720736332929> (last visited Dec. 19, 2012).

45. Zynga CEO Mark Pincus Confirms Layoffs: 5% of Workforce, Potential Closures for U.K., Japan Offices, TECHCRUNCH, (Oct. 23, 2012), <http://techcrunch.com/2012/10/23/zynga-ceo-mark-pincus-confirms-layoffs-5-of-workforce-potential-closures-for-u-k-japan-offices>.

46. NASDAQ:EA, Electronic Arts, Inc., GOOGLE FINANCE, [http://www.google.com/finance?q=NASDAQ%3AEA&ei=9V\\_WULDaMKCclwOoVQ](http://www.google.com/finance?q=NASDAQ%3AEA&ei=9V_WULDaMKCclwOoVQ) (last visited Dec. 19, 2012).

47. PINK:THQI, THQ, Inc., GOOGLE FINANCE, <http://www.google.com/finance?q=NASDAQ%3ATHQI&ei=c2HWUODUA5f0lgOv9gE> (last visited Dec. 19, 2012).

48. See Taylor, *infra* note 69.

49. Kyle Orland, *Gameloft CFO Warns of Social Gaming 'Bubble,'* GAMASUTRA, (May 20, 2011), [http://gamasutra.com/view/news/34764/Gameloft\\_CFO\\_Warns\\_Of\\_Social\\_Gaming\\_Bubble.php#.UNZkbbdD7cE](http://gamasutra.com/view/news/34764/Gameloft_CFO_Warns_Of_Social_Gaming_Bubble.php#.UNZkbbdD7cE).

50. Dean Takahashi, *EA acknowledges Medal of Honor: Warfighter sales will be below expectations*, VB/GAMESBEAT, (Oct. 30, 2012), <http://venturebeat.com/2012/10/30/ea-acknowledges-medal-of-honor-warfighter-sales-will-be-below-expectations/>.

51. Owen Thomas, *Suddenly, Zynga is the Farmville Company Again*, BUSINESS INSIDER, (Oct. 24, 2012), <http://www.businessinsider.com/farmville-2-zynga-2012-10>.

## D. NEW GAME+

It is worth touching briefly on the new types of games that have thrived in this changing marketplace. Examining some of the most successful single games and dominant types reveals a few underlying characteristics that are often seen in clone lawsuits.

*Simplicity.* While there is still a strong market for the complicated sort of games that require a console game controller or a computer keyboard and mouse, social networks and mobile phone and tablets tend to require more limited controls. Hence, the interface for any game seeking to succeed in those markets must be minimal—generally nothing more than a touch screen or mouse in the case of social network games. Having a game that evokes simple, universal themes through its subject matter and artwork is also beneficial, since these themes appeal to the broadening demographic gaming groups.

*Ease of Use.* The same ubiquitous connectivity that allows mobile and social gaming to succeed also leans against involved games that require excessively complicated mechanics or long blocks of continuous game play. While a principal goal of any game is to be enjoyable enough that people want to keep playing it, building in mechanics that allow players to pick the game up and put it down quickly, while still getting a rich experience, caters better to the more casual mobile or social gamer. Asynchronous multiplayer functionality—whereby players can interact and play with one another without needing to be playing at the exact same time—has also seen a surge in popularity.<sup>52</sup>

*Sociability.* The whole point of ubiquitous connectivity is to remain connected. That is why more and more developers are going out of their way to build in multi-player social interactions in their games.<sup>53</sup> Although these interactions could be as direct as playing a game of *Words With Friends* against someone you know, games with a purely one-player interface often also include additional social functionality, such as a mechanic which rewards you

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52. Ryan Rigney, *Asynced: Multiplayer Gaming's New Revolution*, GAMELIFE, WIRED, (Apr. 11, 2012, 3:00 PM), <http://www.wired.com/gamelife/2012/04/asynced-gaming/>.

53. Dean Takahashi, *Zynga CEO: We Aren't the Copycats on Bingo Social Game (exclusive interview)*, VENTURE/GAMESBEAT, (Jan. 31, 2012 9:00 AM), <http://venturebeat.com/2012/01/31/zynga-mark-pincus-copycat-interview/> (Zynga CEO Mark Pincus saying that “our [company’s] strategy since the beginning has been to develop the best game—most fun and most social—for every category of play”). Compare with Russ Pitts, *Don't Be a Hero—The Full Story Behind Spec Ops: The Line*, POLYGON, (Aug. 27, 2012 8:00 PM), <http://www.polygon.com/2012/11/14/3590430/dont-be-a-hero-the-full-story-behind-spec-ops-the-line> (one game designer comparing his game’s multiplayer feature to a “cancerous growth”).

in-game for inviting your friends to play the game. This, of course, has the added benefit to developers of encouraging players to do their marketing for them.<sup>54</sup> The collective display of in-game achievements is also a popular social mechanic.<sup>55</sup> Really just an evolution of the traditional high-score screen seen on an arcade game, achievements allow players to compete indirectly by showing off that they have completed certain goals or tasks. This represents one more way for games to combine game play with the players' existing social network.

*In-game Economy that Translates to Real Dollars.* While the accumulation of points, gold, or other currency is nothing new in gaming, in many contemporary games this currency can now be purchased with real world dollars in what are sometimes termed "microtransactions"<sup>56</sup> or "in-app purchases."<sup>57</sup> Once a player acquires the currency, she can then spend it to acquire additional privileges or advantages within the game.<sup>58</sup> Most obviously, this allows game developers a new way to monetize game content beyond the traditional pay-at-purchase and pay-for-time models. Many games also supplement this so-called freemium model with in-game obstacles that can be circumvented by advantages purchased in-game called "consumables."<sup>59</sup> Consumables often take the form of additional items for the player to use,<sup>60</sup> but the term can also be applied to an action limiting resource sometimes referred to in game-design circles as an "energy mechanic."<sup>61</sup> In games with an explicit energy mechanic, the player's actions consume a finite resource or

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54. While not speaking about games specifically, Mark Zuckerberg, CEO of Facebook, spoke of the desirability of this sort of application design in a 2007 interview. He said,

Advertising works most effectively when it's in line with what people are already trying to do . . . . [T]hey share information with their friends, they learn about what their friends are doing—so there's really a whole new opportunity for a new type of advertising model within that. And I think we'll see more in the next couple months or years on that.

Laura Locke, *The Future of Facebook*, TIME (July 17, 2007).

55. See *Game Center Programming Guide: Achievements*, APPLE, [http://developer.apple.com/library/ios/#documentation/NetworkingInternet/Conceptual/GameKit\\_Guide/Achievements/Achievements.html](http://developer.apple.com/library/ios/#documentation/NetworkingInternet/Conceptual/GameKit_Guide/Achievements/Achievements.html) (last visited Feb. 5, 2013).

56. See *Steamworks – Microtransactions*, VALVE, [http://www.steamgames.com/steamworks/ov\\_micro.php](http://www.steamgames.com/steamworks/ov_micro.php) (last visited Feb. 5, 2013).

57. See *Getting Started With In-App Purchase*, APPLE, <https://developer.apple.com/in-app-purchase/In-App-Purchase-Guidelines.pdf> (last visited Mar. 8, 2013).

58. See *id.*

59. See *id.*

60. See *id.*

61. See Simon Parkin, 'Energy': A Black Spot on the Heart of Contemporary Game Design, HOOKSHOT, INC. (July 2, 2012), <http://www.hookshotinc.com/energy-black-spot-on-the-heart-of-contemporary-game-design/>.

currency that replenishes slowly over time; once the player runs out, he can no longer act.<sup>62</sup> Normally this results in artificially limited game time, forcing players to log on regularly to play for short time periods, which is not an undesirable outcome for a mobile or social game. However, players can also choose to purchase more of the in-game resource with real-world money. Such a game functions off of the old truism that time equals money; by spending more money, players can play more in less time.

## II. DEFINING THE SCOPE OF PROTECTION

Determining the exact scope of copyright protection for a given work requires drawing a line between the expressive elements of the work, which can be protected, and the underlying ideas in the work, which cannot be.<sup>63</sup> When it comes to software programs—which are fixed as literary works of code but are valued primarily for their performance of functional behaviors<sup>64</sup>—drawing this distinction is particularly challenging. Since the software industry grew to prominence in the 1970s and 1980s, copyright law has evolved rapidly to address the challenges posed by the new medium.<sup>65</sup> This Part provides general background on copyright law’s approach to software by discussing the fundamental principles of copyright law and several pertinent, related doctrines. It then briefly outlines the landmark cases that set the standards still in place today.

### A. THE BASICS OF COPYRIGHT PROTECTABLE SUBJECT MATTER

The foundation of copyright law comes from Article I, Section 8 of the Constitution, which grants to Congress the power “[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”<sup>66</sup> This passage is generally understood to mean that the goals of patent and copyright laws are the public good served by incentivizing scientific and artistic advancement, respectively.<sup>67</sup> The private good of rewarding scientists

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62. *See id.*

63. *See Baker v. Selden*, 101 U.S. 99, 103 (1879).

64. *See Samuelson, Davis, Kapor, & Reichman, supra* note 11, at 2315.

65. *See Menell, supra* note 11, at 65.

66. U.S. CONST. art. 1, § 8, cl. 8

67. *See Mazer v. Stein*, 347 U.S. 201, 219 (1954). The Supreme Court stated:

The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in ‘Science and useful Arts.’

and artists with the right to profit from their innovations is an important goal, but a secondary one.<sup>68</sup> Under the Copyright Act, copyright protection subsists only “in original works of authorship fixed in any tangible medium of expression.”<sup>69</sup> The Act enumerates eight categories of works of authorship; the two categories most often implicated by video games are literary works and audiovisual works.<sup>70</sup> The Act also specifically exempts from protection “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.”<sup>71</sup> Although these exemptions were only added explicitly with the passage of the Copyright Act of 1976,<sup>72</sup> the so-called “idea-expression dichotomy,” holding that copyright can protect only the expression of an idea and not the underlying idea being expressed, has been a longstanding foundational principle of the law.<sup>73</sup> This principle is buttressed by the doctrines of merger and *scènes à faire*.<sup>74</sup>

The doctrine of merger holds that any expression that is so closely tied to the idea being expressed that it can be said that the two have “merged” will not be protected.<sup>75</sup> Merger is rare and is most commonly found in works with a “utilitarian function” or in situations permitting only a very limited number of ways of expressing an idea, so that protecting one expression of the underlying idea effectively forecloses all others from using that idea.<sup>76</sup> Since the primary purpose of copyright is the promotion of progress in the arts and sciences for the public good, copyright law errs on the side of not protecting such expressions so that the underlying ideas can remain in the public domain.<sup>77</sup>

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Sacrificial days devoted to such creative activities deserve rewards commensurate with the services rendered.

*Id.*

68. *See* United States v. Paramount Pictures, 334 U.S. 131, 158 (1948).

69. 17 U.S.C. § 102(a) (2012).

70. *Id.*

71. *Id.* § 102(b).

72. 4 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 2.03[D] (Matthew Bender, rev. ed. 2010).

73. *Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240, 1252 (3d Cir. 1983) (“This provision was not intended to enlarge or contract the scope of copyright protection but ‘to restate . . . that the basic dichotomy between expression and idea remains unchanged.’” (citing H.R. Rep. No. 1476, 94th Cong., 2d Sess. 57, *reprinted in* 1976 U.S.C.C.A.N. at 5670)).

74. 4 NIMMER § 13.03[B][3],[4].

75. *See Kay Berry, Inc. v. Taylor Gifts, Inc.*, 421 F.3d 199, 209 (3d Cir. 2005).

76. *See id.*

77. *See id.*

The *scènes à faire* doctrine states that stock characteristics of a category or genre cannot be protected by copyright. This doctrine has a similar rationale: future artists wishing to work in that category or genre must be able to access those stock characteristics.<sup>78</sup> Additionally, these stock elements do not generally have the requisite originality of expression that would justify the reward of a copyright.<sup>79</sup>

Taken together, this doctrinal framework expresses the underlying principles that must be navigated when determining the exact scope of copyright protection for any work, including software and video games. A series of landmark decisions in the 1980s and 1990s demonstrates how courts have applied this framework to the medium.

#### B. THE TOUCHSTONES OF COPYRIGHT IN SOFTWARE

This Section discusses the first wave of software copyright infringement cases. Section II.B.1 discusses the basic elements of a copyright infringement claim, while Section II.B.2 discusses the foundational software copyright cases: *Stern Electronics, Inc. v. Kaufman*,<sup>80</sup> *Apple Computer, Inc. v. Franklin Computer Corp.*,<sup>81</sup> *Whelan Associates Inc. v. Jaslow Dental Lab*,<sup>82</sup> and *Computer Associates International Inc. v. Altai Inc.*<sup>83</sup>

##### 1. *The Elements of a Copyright Infringement Claim*

There are two key elements that a copyright holder must prove to succeed on a claim for copyright infringement: (1) ownership of a valid copyright and (2) unauthorized copying of that copyright on behalf of the defendant.<sup>84</sup> Each of these elements has sub-elements.

The components of copyright ownership that are most relevant to this Note are originality to the author and copyrightability of the subject matter. Proof of registration of a copyright is considered *prima facie* evidence of both these components in a copyright infringement suit. When the plaintiff provides proof of registration, the burden shifts to the defendant to rebut that evidence.<sup>85</sup> Defendants in cloning litigation commonly attack the

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78. See *Cain v. Universal Pictures Co.*, 47 F. Supp. 1013, 1017 (C.D. Cal. 1942).

79. 4 NIMMER § 13.03[B][4].

80. *Stern Electronics, Inc. v. Kaufman*, 669 F.2d 852 (2d Cir. 1982).

81. *Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240 (3d Cir. 1983).

82. *Whelan Associates Inc. v. Jaslow Dental Lab*, 797 F.2d 1222 (3d Cir. 1986).

83. *Computer Associates International Inc. v. Altai Inc.*, 982 F.2d 693 (2d Cir. 1992).

84. 4 NIMMER § 13.01.

85. See *id.* § 13.01[A].

plaintiff's copyright on the grounds of lack of originality<sup>86</sup> or lack of copyright protectable subject matter. These are considered questions of law—not fact—meaning at trial they are decided by judge, not jury.<sup>87</sup>

Unauthorized copying also has two key components: a factual question of whether the defendant had access to the plaintiff's work and copied it, and a legal question of whether the similarities between the alleged infringing work and the plaintiff's work are sufficient to be actionable.<sup>88</sup> These two requirements are often referred to as "access" and "substantial similarity." Crucially, substantial similarity requires similarity between the allegedly infringing content and the protected subject matter; since no copyright can protect an idea, similarities at the idea level cannot be used to prove substantial similarity in an infringement action.<sup>89</sup>

## 2. *The Code and the Fixation*

Today, copyright protection for video games generally takes two forms: protection of the code itself as a literary work and protection of the game as an audiovisual work.<sup>90</sup> The lineage of this protection traces back to two cases from the early 1980s: *Apple Computer*<sup>91</sup> and *Stern Electronics*.<sup>92</sup>

In *Apple Computer*, the Third Circuit held that a computer program expressed either in source or object code is a "literary work" entitled to copyright protection.<sup>93</sup> In that case, Apple filed a copyright infringement suit against a computer company for allegedly copying the Apple operating system software in order to manufacture personal computers compatible with other Apple programs.<sup>94</sup> The court held that the category of literary works was broader than just words and could also include symbols and numbers of the type that might be included in source or object code.<sup>95</sup> Furthermore, the court rejected the argument, advanced by the district court below, that copyright protection could only extend to works that were

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86. The defendant is basically asserting that the plaintiff actually took the disputed property from someone else, and therefore had no copyright to infringe.

87. See 4 NIMMER § 13.03[E][c][3] (citing *Oravec v. Sunny Isles Luxury Ventures, L.C.*, 527 F.3d 1218, 1227 (11th Cir. 2008)).

88. *Id.* § 13.01[B].

89. *Id.* § 13.03[A][1].

90. See *Tetris Holding, LLC v. Xio Interactive, Inc.*, 863 F. Supp. 2d 394, 400 (D.N.J. 2012).

91. *Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240 (3d Cir. 1983).

92. *Stern Electronics, Inc. v. Kaufman*, 669 F.2d 852 (2d Cir. 1982).

93. *Apple Computer*, 714 F.2d at 1249.

94. *Id.* at 1243.

95. *Id.* at 1249.



“designed to be ‘read’ by a human reader.”<sup>96</sup> To reach this conclusion the Third Circuit relied primarily on the revised Copyright Act as amended following the CONTU Report,<sup>97</sup> pointing to the plain language of the statute that extended protection to “works in any tangible means of expression ‘from which they can be perceived or otherwise communicated, either directly or with the aid of a machine or device.’”<sup>98</sup> The court went on to hold that “embodiment of a computer program in a ROM [Read-Only Memory]” is sufficient to meet the fixation requirement, even if it was not a “traditional writing.”<sup>99</sup> Thus, computer programs can be protected as literary works when embodied in computer memory.

In *Stern Electronics*, copyright protection for software was challenged from a different angle: it was alleged that the audiovisual display component of a video game was not sufficiently fixed to meet the fixation requirement.<sup>100</sup> In that case, Stern Electronics had obtained an exclusive sub-license to market and sell the video game *Scramble* in North and South America from the exclusive licensee of Konami Industry Company, Limited, which had originally developed the game.<sup>101</sup> Stern obtained a preliminary injunction against Omni Videogames, preventing Omni from selling its own *Scramble* game, which was virtually identical both audibly and visually.<sup>102</sup>

On appeal, Omni acknowledged the copyright on the code as a literary work, but contended that the audiovisual elements were not properly subject to copyright protection since they were not fixed and depended on input from the player. Since Omni had written different code to recreate these elements, it contended that no infringement had occurred.<sup>103</sup> The Second Circuit rejected this argument and upheld the injunction on the ground that the audiovisual components were fixed enough by virtue of being “permanently embodied in a material object, the memory devices, from

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96. *Id.* at 1248.

97. When the Copyright Act of 1976 was passed, it was widely criticized as inadequately addressing developing digital technologies. Consequently, Congress commissioned the National Commission on New Technology Uses of Copyrighted Works (CONTU) to research the topic. CONTU issued a Final Report in 1979 that recommended explicit inclusion of computer programs within the statute as copyright protectable works. This report was then formally adopted into the Act by Congress. *See generally* NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS, Final Report 1 (1979).

98. *Apple Computer*, 714 F.2d at 1248 (citing 17 U.S.C. § 102(a)).

99. *Id.* at 1249.

100. *Stern Electronics, Inc. v. Kaufman*, 669 F.2d 852, 855 (2d Cir. 1982).

101. *Id.* at 854.

102. *Id.* at 855.

103. *Id.*

which [they] can be perceived with the aid of the other components of the game.”<sup>104</sup> The court further held that the game’s reliance on input from a player did not remove it from copyright protection because the audiovisual aspects of the game remained constant and responded to inputs in a constant, systematic way, making the “repetitive sequence of images . . . copyrightable as an audiovisual display.”<sup>105</sup>

*Apple Computer* and *Stern Electronics* helped establish the general principal that video games, as computer programs, can be protected as both literary works and as audiovisual displays, which—while not completely static—arise as the result of consistent player inputs that are sufficiently systematic to meet the standard of fixation necessary for protection.<sup>106</sup> What these cases do not adequately address, however, is how best to separate the protectable expression inherent in games from their unprotectable underlying ideas.<sup>107</sup>

### 3. *Abstraction and Filtration*

Two later cases helped to clarify the border between protectable expression and unprotectable ideas in the context of software: *Whelan*<sup>108</sup> and *Altai*.<sup>109</sup> In *Whelan*, the Third Circuit first articulated an abstraction approach for separating expression and idea—an approach that has been widely criticized but is, nonetheless, still good law in the Third Circuit.<sup>110</sup> The Second Circuit, in *Altai*, proposed an alternative approach involving abstraction, filtration, and comparison that has been more widely accepted.

In *Whelan*, the Third Circuit held that the proper approach to separating expression from idea was to abstract the core “purpose or function of a utilitarian work” as the idea and consider any functions not necessary to accomplishing that purpose to be protectable expression.<sup>111</sup> In that case, the Third Circuit held that “the idea is the efficient organization of a dental

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104. *Id.* at 856.

105. *Id.* at 857.

106. See Menell, *supra* note 11, at 78 (quoting *Stern Electronics*, 669 F.2d at 885).

107. See *id.* at 79–80.

108. *Whelan Associates Inc. v. Jaslow Dental Lab*, 797 F.2d 1222 (3d Cir. 1986).

109. *Computer Associates International Inc. v. Altai Inc.*, 982 F.2d 693 (2d Cir. 1992).

110. See *Altai*, 982 F.2d at 705 (“We think that *Whelan*’s approach to separating idea from expression in computer programs relies too heavily on metaphysical distinctions and does not place enough emphasis on practical considerations.”); *Plains Cotton Coop. Ass’n v. Goodpasture Computer Serv., Inc.*, 807 F.2d 1256, 1262 (5th Cir. 1987) (criticizing and declining to adopt *Whelan*); *Sega Enters. v. Accolade, Inc.*, 977 F.2d 1510, 1525 (9th Cir. 1992) (“The *Whelan* rule, however, has been widely—and soundly—criticized as simplistic and overbroad.”); *Tetris Holding, LLC v. Xio Interactive, Inc.*, 863 F. Supp. 2d 394, 401 (D.N.J. 2012) (“Yet, even in the face of such criticism, the Third Circuit, sitting *en banc*, has declined to abandon its holding.”).

111. *Whelan*, 797 F.2d at 1236.

laboratory . . . . Because there are a variety of program structures through which that idea can be expressed, the structure is not a necessary incident to that idea.”<sup>112</sup> Thus, the court held that the Dentalab program at issue could be properly protected by copyright.<sup>113</sup>

The *Whelan* test—due in large part to over-reliance on the difficult and vague task of abstracting the core purpose of a program—has been widely criticized by both courts and commentators,<sup>114</sup> leading the Second Circuit to propose a different test in *Altai*, which has been more widely adopted.<sup>115</sup> In that case, a former employee of plaintiff Computer Associates developed a program for his new employer, defendant Altai, by drawing heavily from a program he had worked on while employed at Computer Associates.<sup>116</sup> In response to claims of copyright infringement, Altai directed different employees to rewrite the program using entirely new code based only on written descriptions of the desired functionality.<sup>117</sup> In evaluating the resulting programs to determine whether there was substantial similarity, the Second Circuit employed a new three-step approach consisting of abstraction, filtration, and comparison.<sup>118</sup> The court described the process of abstracting a computer program thus:

A court should dissect the allegedly copied program’s structure and isolate each level of abstraction contained within it. This process begins with the code and ends with an articulation of the program’s ultimate function. Along the way, it is necessary essentially to retrace and map each of the designer’s steps—in the opposite order in which they were taken during the program’s creation.<sup>119</sup>

Once the allegedly infringed program has been properly abstracted, the court explained, the next step consisted of filtering out any unprotectable

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112. *Id.* at 1240.

113. *Id.* at 1239.

114. See, e.g., Stephen R. Englund, *Idea, Process, or Protected Expression?: Determining the Scope of Copyright Protection of the Structure of Computer Programs*, 88 MICH. L. REV. 866, 881 (1990); Peter S. Menell, *Analysis of the Scope of Copyright Protection for Application Programs*, 41 STAN. L. REV. 1045, 1087 (1989).

115. See *Altai*, 982 F.2d at 706; Atari Games Corp. v. Nintendo of Am. Inc., 975 F.2d 832, 839 (Fed. Cir. 1992) (employing Altai’s abstraction-filtration-comparison method); Sega Enters. Ltd. v. Accolade, Inc., 977 F.2d 1510, 1525 (9th Cir. 1992) (“the Second Circuit’s approach is an appropriate one”); Gates Rubber Co. v. Bando Chem. Indus., Ltd., 9 F.3d 823, 834 (10th Cir. 1993); Engineering Dynamics, Inc. v. Structural Software, Inc., 26 F.3d 1335, 1342–43 (5th Cir. 1994).

116. *Altai*, 982 F.2d at 699–700.

117. *Id.* at 700.

118. *Id.* at 706–11.

119. *Id.* at 707.

ideas from protectable expression; this process is highly fact-specific and should take place at each level of abstraction.<sup>120</sup> This process by necessity implicates the doctrine of merger: functions dictated by efficiency should generally not be protected, nor should elements dictated by outside factors or elements taken from the public domain.<sup>121</sup> Once all the unprotectable elements have been filtered out, the final step is to compare any remaining protected material to determine substantial similarity.<sup>122</sup> In applying this test to the facts of *Altai*, the court found the two programs to not be substantially similar.<sup>123</sup> While the Second Circuit's approach in *Altai* remains highly fact-specific, it has been widely adopted by other courts<sup>124</sup> and praised by commentators.<sup>125</sup>

### III. THE RISE OF THE TAKEDOWN NOTICE

As large portions of the video game marketplace move to digital distribution platforms, the administrators of these platforms are becoming critical third parties in policing disputes between copyright holders and alleged infringers. While copyright law still ultimately controls, in practice much of the critical policing of these platforms plays out in the form of takedown notices and responses that are adjudicated by internal reviewers who work for the platform. Under the Digital Millennium Copyright Act ("DMCA"), Internet Service Providers like these digital distribution platforms can avoid third-party liability for infringing material if they "upon notification of claimed infringement . . . respond expeditiously to remove, or disable access to, the material that is claimed to be infringing."<sup>126</sup> Consequently, distribution platforms have adopted very clear procedures for taking down allegedly infringing games—procedures that generally mirror the specifications of the DMCA. Very few clone disputes, although legal in nature, actually make it to court. Instead they are often resolved by settlement negotiations that are influenced by how the third-party reviewers apply the law when responding to takedown notices. This Part discusses the

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120. *Id.*

121. *Id.* at 707–10.

122. *Id.* at 710.

123. *Id.* at 714.

124. *See, e.g.,* Sega Enters. Ltd. v. Accolade, Inc., 977 F.2d 1510, 1525 (9th Cir. 1992) ("the Second Circuit's approach is an appropriate one"); Baystate Tech., Inc. v. Bentley Systems, Inc., 947 F. Supp. 1079 (D. Mass 1996).

125. *See, e.g.,* Bender, *Computer Associates v. Altai: Rationality Prevails*, 8 THE COMPUTER LAWYER 1 (Aug. 1992); Peter S. Menell, *The Challenges of Reforming Intellectual Property Protection for Computer Software*, 94 COLUM. L. REV. 2644, 2652 (1994).

126. 17 U.S.C. § 512(c)(1)(c) (2012).

takedown procedures of the most significant distribution platforms and the extent to which they incorporate copyright law.

A. VALVE'S STEAM

Developed by Valve, the Steam platform is the leading digital distributor for personal computer gaming.<sup>127</sup> Steam's website advises that any copyright holder who believes that her intellectual property has been infringed should contact Valve's copyright agent with the following information: (1) identification of the work allegedly infringed; (2) identification and location of the allegedly infringing work; (3) contact information; (4) a signed statement the submitting party has a good faith belief that the identified use of the material is not authorized, that the submitter is either the copyright holder or authorized to act for the copyright holder, and that all the information is correct.<sup>128</sup> A signature is also required. These requirements mirror the DMCA requirements for takedown notification.<sup>129</sup> The only guidance provided on what constitutes a valid copyright claim is a link to the website of the United States Copyright Offices.<sup>130</sup>

B. GOOGLE PLAY

The Google Play marketplace has almost identical requirements to Steam for submitting a takedown notice. But Play takes the added step of providing an electronic form with which the complaining party can contact Google's Copyright Agent, along with a digital signature system to expedite claims.<sup>131</sup> In its developer distribution terms of service, Google has an additional provision stating that it will take down any product which is found "in its sole discretion" to infringe the intellectual property of others.<sup>132</sup> In the event of such a removal, Google reserves the right to reimburse any customer who purchased the product in the previous year and charge the allegedly infringing party for the resulting costs.<sup>133</sup> Google also documents all

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127. *See supra* note 38.

128. *Legal Info*, VALVE, <http://www.valvesoftware.com/legal.html> (Dec. 22, 2012).

129. *See* 17 U.S.C. § 512(c)(3)(A)(i–vi).

130. *Legal Info*, *supra* note 128.

131. *Report Alleged Copyright Infringement*, GOOGLE HELP HOME, [http://support.google.com/bin/request.py?&product=androidmarket&contact\\_type=lr\\_dmca](http://support.google.com/bin/request.py?&product=androidmarket&contact_type=lr_dmca) (last visited Dec. 22, 2012.).

132. *Developer Distribution Agreement*, GOOGLE PLAY, <http://play.google.com/about/developer-distribution-agreement.html#showlanguages> (last visited Dec. 22, 2012).

133. *Id.*

takedown notices it receives by reporting them to third-party clearinghouses, or the public.<sup>134</sup>

#### C. THE iTUNES APP STORE

The iTunes App Store takedown protocols are nearly identical to Google's. The App Store provides a form with fields for the required information. Completed forms are then sent electronically to Apple's copyright agent.<sup>135</sup> On an adjacent page on its website, Apple provides general background information as to what constitutes a valid copyright, including the explanation that "[c]opyright exists in the expression of an idea, but not the idea itself."<sup>136</sup> In its App Store Review Guidelines, in addition to outlining various criteria pertaining to quality and content, Apple also advises that use of any "protected 3rd party material," such as copyrights, "requires a documented rights check which must be provided upon request."<sup>137</sup>

#### D. FACEBOOK

Facebook functions slightly differently from the other digital distribution platforms. While Steam, Google Play, and the App Store all offer customers direct downloads, Facebook users generally log on and play the games on the social network itself, either in their web browser or through the use of a mobile program. Still, Facebook's takedown procedures for allegedly infringing material are largely the same: they require the same statutory disclosures and also offer an electronic form for contacting their copyright agent.<sup>138</sup> Following the filing of a complaint, the agent processes the claim and considers whether or not to remove the allegedly infringing content.<sup>139</sup>

### IV. SHORT STUDIES IN THE ART OF INFRINGEMENT

The previous Parts provide background as to the context of the Clone Wars, examining recent case studies can offer a clearer picture of how these concepts actually apply in practice. This Part examines three different examples of clone infringement to determine what they suggest about the

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134. *Removing Content From Google*, GOOGLE, <http://support.google.com/bin/static.py?hl=en&ts=1114905&page=ts.cs> (last visited Feb. 4, 2013).

135. *Legal Questions—Claims of Copyright Infringement*, APPLE, <http://www.apple.com/legal/contact/#copyright-infringement> (last visited Dec. 22, 2012).

136. *Copyright Information*, APPLE, <http://www.apple.com/legal/trademark/copyright.html> (last visited Dec. 22, 2012).

137. *Id.*

138. *Reporting Copyright Infringements*, FACEBOOK, <https://www.facebook.com/help/400287850027717> (last visited Feb. 5, 2013).

139. *Id.*

larger trend and the role of copyright law. First it presents a more detailed discussion of *Mino*. Second, it examines the rise and fall of *Scrabulous*. Finally, it addresses the larger series of cases involving social-gaming giant Zynga.

1. *Tetris, By Any Other Name*

Although the story of Xio Interactive helps demonstrate how many of the previously discussed ideas play out in practice, the same characteristic that makes it a useful instructional case also makes it a significant outlier from the general trend of clone litigation: it was resolved in court. The vast majority of clone infringement cases, however, end up settling well short of a trial. Obviously, high legal costs often motivate settlement. But, additionally, the fact-heavy nature of the dissection of expressions and ideas tends to rely on imprecise analytical steps such as how best to “abstract” a game, making litigation harder to predict.<sup>140</sup> Rather than leaving the fate of valuable intellectual property in the hands of a judge, many companies would prefer to negotiate a settlement instead.

In response to Tetris, LLC’s infringement claims, Xio adopted what has become a fairly standard clone defense: that it had not copied any protected creative expression and instead copied only the unprotected rules and functionality of *Tetris*.<sup>141</sup> The court rejected Xio’s legal arguments, holding that the “overall look and feel of the two games is identical” and that “[t]here is such similarity between the visual expression of *Tetris* and *Mino* that it is akin to literal copying.”<sup>142</sup> The court also found infringement with regards to a number of gameplay elements present in both games. It held that “[n]one of these elements are part of the idea (or the rules or the functionality) of *Tetris*, but rather are means of expressing those ideas.”<sup>143</sup>

Although this decision only comes from a district court, it still serves as an instructive new piece in the evolving landscape of video game copyright litigation. This case has much in common with other clone lawsuits, most notably that it features a larger video game company—with an established piece of intellectual property—claiming infringement against a smaller start-up company. Additionally, the games in question are mobile platform apps of

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140. *Tetris Holding, LLC v. Xio Interactive, Inc.*, 863 F. Supp. 2d 394, 399 (D.N.J. 2012).

141. See Eric Goldman, *Recent Ruling in Triple Town/Yeti Town Game App Dispute Provides Cautionary Lessons for Both EA and Zynga*, FORBES (Sept. 27, 2012), <http://www.forbes.com/sites/ericgoldman/2012/09/27/recent-ruling-in-triple-townyeti-town-game-app-dispute-provides-cautionary-lessons-for-both-ea-and-zynga>.

142. *Tetris Holding, LLC*, 863 F. Supp. 2d at 410.

143. *Id.* at 413.

a relatively simple nature, making the expressive and functional elements of the game more tightly interwoven.

But the outlier nature of the *Mino* case suggests that it may have only minimal predictive value. Most notably, Xio's product was an especially blatant clone: when looking at videos of the gameplay and screenshots, the court found that the similarities between the two were so great that they represented virtually identical copying, clearly establishing substantial similarity.<sup>144</sup> It was also clear that copying took place due to statements made by Ms. Golden, who admitted that her company downloaded several copies of *Tetris* while making *Mino* with the intent of making Xio's game as similar as possible.<sup>145</sup> Two other factors weighed against Xio's defense that it copied only unprotectable ideas. First, *Tetris* is a particularly established piece of intellectual property as far as video games are concerned, and *Tetris* had been mimicked—though rarely so blatantly—by other games before. This suggests that there are other ways of expressing the underlying ideas, thus weighing against any suggestion of merger.<sup>146</sup> Second, *Tetris* deals with falling blocks that interact in what the court called “wholly fanciful” ways—as opposed to having gameplay grounded in any depiction of reality—so the court held that this idea could have been expressed in many ways beside the one *Mino* chose to copy.<sup>147</sup>

It is also worth delving deeper into how the district court applied a substantial similarity analysis. Being in the District of New Jersey, the court was bound by *Whelan*.<sup>148</sup> However, the court opted to reconcile that approach somewhat with the *Altai* abstraction-filtration approach.<sup>149</sup> The court in *Tetris Holding* took the view that no matter how one chooses to articulate the steps of the process—whether through *Altai*'s abstraction-filtration or *Whelan*'s purpose-based description—the central task of the case was to “delineate between the copyrightable expression in *Tetris* and the unprotected elements of the program, then evaluate whether there is substantial similarity between such expression and Defendant's *Mino* game.”<sup>150</sup> In abstracting *Tetris*, the court found that:

*Tetris* is a puzzle game where a user manipulates pieces composed of square blocks, each made into a different geometric shape, that

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144. *Id.* at 410.

145. *Id.* at 397.

146. *Id.* at 412.

147. *Id.* at 408.

148. *Whelan Assocs., Inc. v. Jaslow Dental Lab*, 797 F.2d 1222, 1234 (3d Cir. 1986).

149. *Tetris Holding*, 863 F. Supp. 2d at 403.

150. *Id.*



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.<sup>151</sup>

From this abstraction, the court then took an interesting step: it reasoned that since any element of a game can be tied back to the rules of a game, Xio's defense that game elements related to rule functionality cannot be protected by copyright does not succeed.<sup>152</sup>

The case also demonstrates the takedown process in action. Originally posted to the iTunes App Store, *Mino* passed review and was made available to customers. It received largely positive reviews and was praised for possessing multi-player functionality that was actually superior to the contemporary version of *Tetris* available on the iTunes App Store at the time.<sup>153</sup> Nonetheless, *Mino* was taken down once Tetris, LLC notified iTunes of the alleged infringement.<sup>154</sup> The iTunes App Store, as part of its review process, informed Tetris, LLC that the game would be returned to the store unless more formal legal action was taken, leading to the lawsuit.<sup>155</sup> In this way, the iTunes App Store actually channeled its own review into the legal system by declining to render any verdict of its own as to the similarity of the games. That allowed the legal similarity of the games to be established in court. It is worth noting that at this point the costs of the dispute skyrocketed: developing and submitting the game was done inexpensively, and the takedown procedures initiated by Tetris, LLC required no significant fees. The introduction of legal fees changed the financial equation dramatically which, of course, helps explain why most similarly situated parties have chosen to settle before trial.

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151. *Id.* at 409.

152. *Id.*

153. *Mino*, 148APPS, <http://www.148apps.com/reviews/mino/> (last visited Jan. 21, 2013).

154. *Tetris Holding*, 863 F. Supp. 2d at 397.

155. *Id.*

## 2. S-C-R-A-B-U-L-O-U-S

The story of the game *Scrabulous* tells a slightly different cloning story, one which demonstrates how timing, popularity, and a shrewd understanding of copyright law can work together to determine the success of a game.

The story begins in 2005, when Rajat and Jayant Agarwalla conceived of the idea to start a website where users could go to play the popular board game *Scrabble*, which they had both played frequently while growing up in India.<sup>156</sup> They launched their website in 2006 and at first had only a modest user base.<sup>157</sup> Looking to reach a larger audience, the brothers launched a Facebook application of the same name—and soon found themselves the proud owners of the most popular Facebook game, with over 700,000 daily users, which generated an estimated \$25,000 a month.<sup>158</sup> Unsurprisingly, Hasbro, Inc., which owned the U.S. copyright in *Scrabble*, and Mattel, which owned the global copyright, took exception to someone else achieving overnight success with their intellectual property.<sup>159</sup> Rather than immediately filing suit, Hasbro and Mattel attempted to purchase *Scrabulous* in 2008, but the two brothers refused, reportedly holding out for a “multiple” of ten million dollars, well above what Hasbro was willing to pay.<sup>160</sup>

With the carrot unsuccessful, Hasbro switched to the stick, filing copyright and infringement lawsuits and pursuing takedown proceedings to remove the game from Facebook in July of 2008.<sup>161</sup> The Agarwallas removed the app from Facebook<sup>162</sup> and would eventually rebrand their game as *Lexulous*.<sup>163</sup> This was a similar spelling game but played on a different board, with different point totals allotted to the tiles and slightly altered rules.<sup>164</sup>

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156. Heather Timmons, *Online Scrabble Craze Leaves Game Sellers at Loss for Words*, N.Y. TIMES, (Mar. 2, 2008), available at [http://www.nytimes.com/2008/03/02/business/02game.html?\\_r=0&sq=facebook%20scrabulous&st=cse&adxnnl=1&scp=10&adxnnlx=1356292130-QhTb1Og0u6V8ESO5AoV4A](http://www.nytimes.com/2008/03/02/business/02game.html?_r=0&sq=facebook%20scrabulous&st=cse&adxnnl=1&scp=10&adxnnlx=1356292130-QhTb1Og0u6V8ESO5AoV4A).

157. *See id.*

158. *Id.*

159. *See id.*

160. *What Price Scrabulous?*, N.Y. TIMES (Mar. 4, 2008 7:52 AM), <http://dealbook.nytimes.com/2008/03/04/scrabulous-founders-look-to-score-big-report-says/>.

161. Brad Stone, *Hasbro Notches Triple-Word Score Against Scrabulous with Lawsuit*, NYTIMES.COM, (July 24, 2008 12:38 PM), <http://bits.blogs.nytimes.com/2008/07/24/hasbros-notches-triple-word-score-against-scrabulous-with-lawsuit/>.

162. Vindu Goel, *Game Over: Scrabulous Shut Down on Facebook*, BITS, N.Y. TIMES, (July 29, 2008 8:47 AM), <http://bits.blogs.nytimes.com/2008/07/29/facebook-shuts-down-scrabulous/>.

163. *See* Stefan Fatsis and Michele Norris, *Word Score! Scrabulous Returns as Lexulous*, NPR (Jan. 14, 2009), <http://www.npr.org/templates/story/story.php?storyId=99338221>.

164. *See id.*

Satisfied that its copyright had been defended, Hasbro dropped the lawsuit in December of that year.<sup>165</sup>

Beginning in March of 2008, Mattel launched its own Facebook game, *Scrabble by Mattel*. As of March 9, 2013, Lexulous had 166,632 monthly average users,<sup>166</sup> while Mattel's *Scrabble*, developed by major video game developer Electronic Arts had 1,266,664.<sup>167</sup>

Although this may seem like an appropriate and unsurprising outcome, the story is slightly more complicated. In July of 2009, while the rebranded *Lexulous* and the officially-sanctioned *Scrabble* were both struggling to match the popularity of the original *Scrabulous*, a new player entered the tile-based word game space: Zynga. Its offering, *Words With Friends*, followed the *Lexulous* model, keeping the underlying idea of a tile-based spelling game but altering the layout of the board and the point values assigned to the tiles, just enough to avoid any copyright infringement liability. *Words With Friends* also offered a more streamlined interface and the ability to play randomly selected opponents. On the strength of these improvements, and having the benefit of Zynga's burgeoning Facebook market presence, *Words With Friends* quickly eclipsed both its forerunners in popularity. On March 9, 2013, it boasted 13,666,160 monthly average users.<sup>168</sup>

The respective rise and fall of these three games demonstrates the way that a savvy player can negotiate the thin protections copyright offers to video games in order to capitalize on the demands of the market. In the beginning, the Agarwallas struck upon a tremendous amount of untapped demand for an app-based spelling game like *Scrabble*. However, they lacked the legal wherewithal to know that producing an exact duplicate of *Scrabble* would expose them to infringement liability, leading them to drastically overvalue the worth of their game when Hasbro and Mattel sought to buy it. After those talks broke down, Mattel and Hasbro knew enough to continue to enforce their copyright but were not able to follow up with a game strong enough to adequately serve the demands of the market. Zynga, meanwhile,

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165. *SCRABBLE Maker Hasbro Drops Lawsuit over Online Word Game*, AFP, GOOGLE, (Dec. 15, 2008), <http://www.google.com/hostednews/afp/article/ALeqM5g5DtKdbBiflzI9dDqor4B9tOmIgQ>.

166. All application use statistics are taken from the website AppStats.eu, which tracks Facebook gaming application data. *Lexulous Word Game*, APPSTATS.EU, <http://appstats.eu/apps/facebook/1000098-lexulous-word-game> (last visited March 9, 2013).

167. *SCRABBLE*, APPSTATS.EU, <http://appstats.eu/apps/facebook/1000466-scrabble> (last visited Mar. 9, 2013).

168. *Words With Friends*, APPSTATS.EU, <http://appstats.eu/apps/facebook/1005784-words-with-friends> (last visited Mar. 9, 2013).

which neither produced a completely original intellectual property nor discovered an entirely new market, actually achieved the most commercial success of the three. By quickly producing and marketing *Words With Friends*, Zynga was able to capitalize on the underserved demand for spelling games of this type, while still implementing enough minor changes in how that concept was expressed to avoid any copyright liability. It would not be the last time Zynga would attempt to do so.

3. *Zynga, or How the Best Need Not Be First*

Zynga has become an industry leader in the mobile and social gaming space, while simultaneously becoming one of the most common parties in clone litigation suits; these two facts are not unrelated. The company has embraced the methodology exemplified by the *Words With Friends* success. CEO Mark Pincus even admitted as much in an internal memo, which said that “[w]e don’t need to be first to market. We need to be the best in market . . . . We evolve genres by making games free, social, accessible and highest quality.”<sup>169</sup> While that may be nothing more than a core statement of beliefs, those beliefs are almost exactly in line with copyright law’s approach to software: protect it enough to encourage innovation but keep the protection narrow enough to allow later developers to push the innovative process forward.

Zynga has backed up Pincus’s words with an aggressive stance toward litigation, one that has seen it on both sides of alleged infringement claims. Electronic Arts filed a lawsuit in 2012 alleging that Zynga’s *The Ville* infringed Electronic Arts’ *The Sims Social*,<sup>170</sup> while earlier that year Buffalo Studios accused Zynga *Bingo* of being a clone of its own *Bingo Blitz*.<sup>171</sup> Smaller developer Nimblebit eschewed legal action as too costly and took to the court of public opinion by releasing a graphical comparison of Zynga’s *Dream Heights*, which Nimblebit felt infringed on its own *Tiny Tower*.<sup>172</sup> Zynga has responded harshly to these accusations. The company has frequently alleged infringement on the part of its accusers, and has adopted the general position that all games necessarily infringe to some degree upon the games that came

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169. Keith Andrew, *We’re Not the First but We Aim to be Best says Zynga CEO Pincus, Refuting Clonegate*, ZYNGA NEWS, POCKETGAMER.BIZ, <http://www.pocketgamer.biz/r/PG.Biz/Zynga+news/news.asp?c=37418> (last visited Dec. 22, 2012).

170. See Complaint, Electronic Arts v. Zynga, 3:12-cv-04099 (N.D. Cal. filed Aug. 3, 2012).

171. See Takahashi, *supra* note 53.

172. See Paul Tassi, *Everything Wrong with Zynga in One Image*, FORBES, (Jan 25, 2012 11:04 AM), <http://www.forbes.com/sites/insertcoin/2012/01/25/everything-wrong-with-zynga-in-one-image/>.

before; this argument slots neatly into Zynga's attitude of innovation through improvement.<sup>173</sup>

This is not to say that Zynga does not vigorously protect its own intellectual property. In one case, Zynga sued Brazilian start-up Vostu for allegedly cloning its games so closely that Vostu even copied the bugs in the games.<sup>174</sup> Vostu responded that Zynga had been doing the same for years, that the two companies shared investors, and that the lawsuit was only retaliation for a failed business venture between the two to help Zynga expand its market in Brazil.<sup>175</sup> While Zynga's case was pending in U.S. court, Zynga also filed suit in Brazil, where a Brazilian judge quickly issued an injunction shutting down Vostu's games for forty-eight hours.<sup>176</sup> The U.S. judge—worried about having his jurisdiction over the case trumped by the Brazilian court—then attempted to enjoin the Brazilian court from issuing such an order on the grounds that Zynga was flouting U.S. jurisdiction.<sup>177</sup> While the case ultimately settled,<sup>178</sup> it demonstrates the strange flavor clone cases can take on when they intermingle with international copyright laws, although in this case the peculiarities were mostly jurisdictional.

There is less to be gleaned from Zynga's individual legal battles than there is from the larger trend. For the most part, the cases operate in much the same vein as *Words With Friends* did: a smaller company develops a successful game concept, which Zynga then duplicates with varying degrees of augmentation, then leverages across its larger market share to achieve greater commercial success. While there may be something unsavory about a business model that explicitly seeks to capitalize on the originality of others, that business model is not—at least in theory—out of line with the goal of copyright law. So long as Zynga is actually innovating upon those game concepts, it is difficult to argue that the promotion of the useful arts and

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173. For a series of visual comparisons of Zynga offerings with the games some suspect them of cloning, see Paul Tassi, *A Photo Retrospective of the Games Developers Say Zynga Has Cloned*, FORBES, (Aug. 8, 2012 11:00 AM), <http://www.forbes.com/sites/insertcoin/2012/08/08/a-photo-retrospective-of-the-games-developers-claim-zynga-has-cloned/>.

174. Michael Arrington, *WAR! Zynga Sues the Hell Out Of Brazilian Clone Vostu*, TECHCRUNCH, (June 16, 2011), <http://techcrunch.com/2011/06/16/war-zynga-sues-the-hell-out-of-brazilian-clone-vostu/>.

175. Michael Arrington, *U.S. Judge Slaps Around Brazilian Court in Zynga v. Vostu*, TECHCRUNCH (Aug. 11, 2011), <http://techcrunch.com/2011/08/11/u-s-judge-slaps-around-brazilian-court-in-zynga-v-vostu/>.

176. *Id.*

177. *Id.*

178. Leena Rao, *Zynga, Vostu Settle Copyright Lawsuit; Brazilian Gaming Company to Pay Up*, TECHCRUNCH, (Dec. 6, 2011), <http://techcrunch.com/2011/12/06/zynga-vostu-settle-copyright-lawsuit-brazilian-gaming-company-to-pay-up/>.

sciences is being thwarted. If anything, the inequities of the business model are more economic in origin than legal—Zynga’s larger size allows it to promote games to a much greater extent than smaller developers, while the high legal costs of litigation insulate it from some of the liability it should perhaps face.

But one key flaw in Zynga’s conception of its own innovation is that it relies on circular reasoning. It justifies its cloning on the grounds that it is making better games, and it proves that it is making better games by pointing to superior sales numbers; these sales numbers are often the direct result of cloning. Although strict capitalist economics would argue that selling more units is a strong indicator that the market considers a product to be superior, there is some danger in Zynga confusing correlation for causation.<sup>179</sup> It is not unreasonable to suppose that Zynga simply has better sales because it is already such a well-established brand in the mobile and social gaming markets that it can leverage its reputation and marketing power to connect with consumers and sell more games, regardless of whether those games are actually any better than their alleged source material. Without being able to control for the economic inequalities of the marketplace, it will likely remain difficult to tell if success is from marketing power or from game innovation, especially when cases so often settle before courts can apply a full legal analysis. But there is reason for skepticism whenever Zynga’s supposed innovations begin to look a bit more like minor cosmetic tweaks to avoid the narrow scope of copyright protection.

The recently settled case *Electronic Arts v. Zynga* was thought by some to be the case to take Zynga to task for its “fast following” ways.<sup>180</sup> In that case, Maxis, a division of Electronic Arts—an even larger player in the video game industry than Zynga—alleged that Zynga’s *The Ville* infringed on Maxis’ *The*

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179. Zynga has drawn criticism from some for being too concerned about increasing their player base and engineering new social mechanics to the detriment of its games’ aesthetic, artistic, and gameplay elements. See Lejacq, *supra* note 29. One commentator labeled Zynga’s repetitive, social gameplay elements as “coercive” and lacking in creativity and termed its place in the social gaming market as “The Zynga Abyss.” Benajmin Jackson, *The Zynga Abyss*, THE ATLANTIC, (Jan. 24, 2012 3:41 PM), available at <http://www.theatlantic.com/technology/archive/2012/01/the-zynga-abyss/251920/>.

180. See Owen Thomas, *EA And Zynga Have Given Up On A Pointless Lawsuit Over An All-But-Dead Game*, BUS. INSIDER (Feb. 15, 2013), <http://www.businessinsider.com/ea-zynga-the-ville-lawsuit-2013-2>; Kain, *supra* note 10. In business terms, a “fast follower” is a company that does not engage in complete innovation, but instead closely follows innovators in order to incorporate and improve upon those innovative ideas, while not risking as much capital on research and development. See Ana Andjelic, *The Fast-Follower Digital Game Plan*, ADAGE DIGITAL (Dec. 4, 2012) <http://www.cmo.com/articles/2012/12/7/the-fast-follower-digital-game-plan.frame.html>.

*Sims Social*.<sup>181</sup> The alleged copying went fairly deep: not just game mechanics, but also character types, design, artwork, dimensions of rooms, and color schemes, down to the Red-Green-Blue values.<sup>182</sup> Initially, both sides seemed to have the determination and resources to see the case to trial, offering the possibility that this case could alter the landscape of clone video game litigation.<sup>183</sup> But even if the case had gone to trial, the extreme nature of the alleged copying might, even if proven, have presented only another narrow sort of holding, like the one seen in *Tetris Holding*. Alternatively, because the two games center around playing an everyday, normal person conducting normal, realistic activities, a court might also have held many aspects of the game uncopyrightable under the *scènes à faire* doctrine, under the rationale that Electronic Arts cannot be given a monopoly on simulating the real world. Ultimately—to the chagrin of those hoping for a landmark ruling to change the law<sup>184</sup>—the two companies settled out of court, leaving this case as just one more of Zynga’s clone business dealings.<sup>185</sup>

## V. THE BUSINESS OF CLONING

In surveying the supposed battlefields of the Clone Wars, one immediate conclusion is that they have been poorly named. From a legal standpoint, there’s nothing particularly warlike about them. Rather, they represent the collision of a rapidly evolving marketplace with a narrow, fact-heavy legal standard, the outcome of which is difficult to predict outside of court. Meanwhile, costs are falling all around the video game industry. Technology has created the capability to conduct development, distribution, and retail for much less than ever before, allowing a tremendous influx of new participants into the industry.

But one price tag remains higher than ever: the legal costs of asserting or defending a copyright in court. While the quasi-legal review and appeal processes followed by digital distribution platforms in takedown proceedings

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181. See Complaint, *Electronic Arts v. Zynga*, 3:12-cv-04099 (N.D. Cal. filed Aug. 3, 2012).

182. See *id.*

183. See Steve Peterson, *Zynga Slams EA in Court Filing, Calls Them “Desperate,”* GAMESINDUSTRY INT’L (Sept. 14, 2012), <http://www.gamesindustry.biz/articles/2012-09-14-zynga-slams-ea-in-court-filing-calls-them-desperate>.

184. See Ben Maxwell, *EA and Zynga Settle The Ville Legal Dispute Out of Court*, EDGE ONLINE (Feb. 18, 2013), <http://www.edge-online.com/news/ea-and-zynga-settle-the-ville-legal-dispute-out-of-court/>.

185. Frank Cifaldi, *EA and Zynga Settle The Ville Copycat Case Out of Court*, GAMASUTRA (Feb. 15, 2013), [http://www.gamasutra.com/view/news/186789/EA\\_and\\_Zynga\\_settle\\_The\\_Ville\\_copycat\\_case\\_out\\_of\\_court.php#.UScXdOjD7cG](http://www.gamasutra.com/view/news/186789/EA_and_Zynga_settle_The_Ville_copycat_case_out_of_court.php#.UScXdOjD7cG).

offer a first step, for now the video game industry is continuing to expand and diversify, in part, on the strength of newcomers who simply do not have the financial resources to access the court system. Barring a dramatic plunge in legal costs or a surprising new ruling that sets a far firmer legal standard than the precedent suggests, the onus will continue to be on digital distribution platforms to develop takedown review and appeal regimes that are as robust as possible while still remaining consistent with the law. This will permit developers to at least get their rightful remedy in the marketplace, if not the courts.

Of course, this risks concentrating too much power in a small number of distribution platforms, while continuing to leave the copyright law as a trump card that only richer developers can play. This may be less than ideal, but it appears to be the most likely direction for the industry. While development becomes more accessible, the distribution platforms are poised to become the new gatekeepers of the realm, with considerable power to not only administer enforcement of copyright infringement claims, but also to control access to consumers. Over the long term, this could actually serve to help democratize development even further—as a few distribution platforms become increasingly influential, the ability of larger developers to dictate advantageous distribution terms may wane, creating an ecosystem where smaller, leaner developers with lower overhead can compete based on the quality of their games alone. Conversely, it is also possible that larger developers will leverage their superior resources to cut advantageous distribution deals, further exacerbating the imbalances of the system. For now, barring an unprecedented decision veering off-course in the scope of software protection, copyright law is unlikely to weigh in one way or the other. Instead, clone litigation will likely continue to migrate away from the courts and toward the review mechanisms set up by the digital distribution platforms. To the extent the Clone Wars really are a war, that is where the coming battles will be fought.