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The Psychological and Virtual Siege of Loot Boxes

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THE PSYCHOLOGICAL AND VIRTUAL SIEGE OF LOOT BOXES

*Elpidio K. Cruz*

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I. AN UNPRECEDENTED LANDSCAPE

When you think of sports, how do you imagine where the athletes play? The lushest grass you’ve ever seen? An unending blue sky? None of the above? If you are watching the game from the comfort of your home, what channel is broadcasting it? CBS? ESPN? Now compare your answer to an answer you would have given a few years ago. Any similarities?

Technology is changing rapidly, with the video entertainment world right behind it. Virtual reality, biometric scanning, and all sorts of other developments are changing the way the world views technology. Who would have thought that you could walk around your neighborhood and catch Pokemon?¹

One change that was unlikely to be predicted was the rise of eSports.² An eSport is an online, multiplayer video game played competitively that spectators can view live.³ Simply put, these games take a sport and make an electronic version of it. People are now able to play soccer, football,

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². The eSport industry has exploded within the past five years. In 2014, it was reported that over 200 million individuals viewed or participated in eSports, 89 million of whom were “frequent viewers” or “enthusiasts.” Additionally, while the field has been traditionally male dominated, studies show that 38%–44% of American eSports fans are women. One of the most exciting parts is that these numbers will only continue to grow. *See* Ben Casselman, *Resistance Is Futile: eSports Is Massive . . . and Growing*, ESPN (May 22, 2015), http://www.espn.co.uk/espn/story/_/id/13059210/esports-massive-industry-growing.

and basketball without ever having to leave their couches. The most exciting part is that these people can compete with other players around the world, all with the push of a button. These competitions can occur at a place in town or entirely through the internet. Such accessibility allows massive tournaments to take place with grand prizes and relatively low, if any, location costs. In fact, the winner of the FIFA Interactive World Cup 2017, an eSports soccer tournament, was awarded $200,000 for his victory.

The debut of the first ever FIFA eWorld Cup took place in 2018. For this tournament alone, 20 million individuals from around the world competed—only thirty-two were admitted into the tournament. The qualifiers were from various countries, including the United States, France, Germany, and Saudi Arabia.

Throughout online gaming, leagues are developing where players compete against each other. Most games use "rankings" to compare their players globally. Now, what happens when you create a tournament for teams within these leagues?

Consider League of Legends, a free multiplayer online battle arena game that places individuals on teams to fight against each other. It requires strategy, patience, and teamwork. It also provides an opportunity

4. For example, EA Sports Inc. has developed sports games, including FIFA, Madden, and NBA LIVE, that simulate soccer, football, and basketball, respectively. See EA SPORTS, https://www.easports.com (last visited June 24, 2019).


7. Id.


9. Id.

10. Id.

to generate income through sponsorship, product sales, and sports gambling.  

Certain game mechanics take advantage of a system of in-game items that allow players to customize their avatar. For example, in games such as Fortnite, there are different items or skins that a player may use. The items may be earned either through accomplishments while playing or purchased with virtual currency through a randomized in-game mechanic. Players, by merely using the items in-game, generates free product placement. Further, the limited-edition nature of these items creates an environment where players will spend real money to acquire such limited edition or customized items.

While normally not an issue, what happens when these items are purchased by minors? Children are known to be susceptible to the "I have to have it because everyone else has one" mindset. When children obtain these items through a system, much like a virtual "in-game casino," certain legal issues arise. This Note will examine the development of in-game purchases in the video game industry.

II. WHAT ARE LOOT BOXES AND WHAT DO THEY DO?

Most video games allow the use of fiat currency to acquire objects and assistance within the video game. The most common forms of obtaining these perks are the acquisition of loot boxes and micro-transactions. A

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17. Id.
micro-transaction is generally an in-game purchase that allows the player to access additional content.\textsuperscript{18} That content may assist a user in completing objectives that would be possible to complete without the additional purchase, but with more difficulty.\textsuperscript{19}

A loot box, which contains an unknown item or items, is given to players as a prize.\textsuperscript{20} Loot boxes do not create a direct financial incentive, but are instead a “game of chance.”\textsuperscript{21} If a player is lucky enough to get the item he or she wants—great! If not, then the player is stuck with undesirable junk items. Players want the most unique and rare loot to show off to their friends or their competitors.\textsuperscript{22} Purchasing a loot box is usually cheaper than purchasing rare items directly, and sometimes an item is only obtainable through the acquisition of a loot box.\textsuperscript{23} This creates an incentive for players to try to open as many loot boxes as possible to increase their odds of obtaining the most enticing loot. The loot could be simply aesthetic, such as a new costume, or something more substantial, such as a valuable weapon.\textsuperscript{24} With these new items, a player may perform better than competitors in the game, which then encourages other players to open boxes to even the playing field.

Some games, such as Overwatch or League of Legends, allow players to earn the boxes through in-game performance or through special giveaways only.\textsuperscript{25} As noted above, those games also allow players to acquire loot boxes with fiat currency.\textsuperscript{26} When fiat currency is involved, it is difficult to ignore the similarities between loot boxes and real-world

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\textsuperscript{21} Id.


\textsuperscript{25} See id.; Friedman, supra note 23.

gambling.\textsuperscript{27} A loot box operates like a slot machine: a player inserts a coin and receives a random prize.\textsuperscript{28} One could argue the mechanics of loot boxes are more akin to the toy dispensing machines located in local supermarkets. Much like loot boxes, those machines are usually catered to children. A child puts a quarter in the slot, turns it, receives a random toy from inside, and is usually disappointed with the result.

As demonstrated by world leaders, the industry and players are unsure how to categorize a loot box.\textsuperscript{29} In this area of uncertainty, the only sure thing is that the issue is coming to the forefront of the industry’s attention.\textsuperscript{30} Moreover, loot boxes—and their similarity to gambling—has even gained the attention of state legislators. Some states have determined that the loot box system is gambling and must be regulated in the same way as other gambling machines. For example, Minnesota plans to restrict the sale of games with loot box mechanics to persons 18 years old or older.\textsuperscript{31} Further, Minnesota would require that those games be sold with a warning about the presence of the loot box mechanic.\textsuperscript{32} Other states following suit are California, Hawaii, Indiana, and Washington State.\textsuperscript{33}

The issue is also being considered in Australia: the Australian Environment and Communications Reference Committee recommended that loot boxes be restricted to individuals over 18 years old.\textsuperscript{34} However, no Australian legislation has been enacted.\textsuperscript{35} Other countries around the world are also investigating the issue of whether or not loot boxes are a form of gambling.\textsuperscript{36} Japan has addressed the issue by banning a specific

\begin{itemize}
\item \textsuperscript{27} Nick Santangelo, Ireland Backs Down from Labeling Loot Boxes as Gambling, IGN (Oct. 1, 2018, 7:34 AM), https://www.ign.com/articles/2018/10/01/ireland-backs-down-from-labeling-loot-boxes-as-gambling (“Where a game offers the possibility of placing a bet . . . for financial reward within the game, then, in my view it must be licensed as a gambling product.”).
\item \textsuperscript{28} MacDonald, supra note 20.
\item \textsuperscript{29} See id. (noting that Belgium found loot boxes violated gambling legislation); Santangelo, supra note 27 (noting that Ireland did not classify loot boxes as gambling).
\item \textsuperscript{30} MacDonald, supra note 20 (noting that the loot box mechanic created concern among players and politicians).
\item \textsuperscript{31} 2018 Minn. Laws 8385, https://www.revisor.mn.gov/bills/text.php?number=SF4042&version=latest&session=ls90&session_year=2018&session_number=0.
\item \textsuperscript{32} Id.
\item \textsuperscript{33} Bailey, supra note 24; see also Alexandra, supra note 26 (describing Hawaii’s view on the matter).
\item \textsuperscript{34} Shaun Prescott, Loot Boxes Are “Psychologically Akin to Gambling,” According to Australian Study, PC GAMER (Sept. 18, 2018), https://www.pcgamer.com/loot-boxes-are-psychologically-akin-to-gambling-according-to-australian-study/.
\item \textsuperscript{35} Ryan Whitwam, Study: Loot Boxes Are ‘Psychologically Akin to Gambling,’ EXTREME TECH (Sept. 18, 2018, 4:02 PM), https://www.extremetech.com/gaming/277317-study-loot-boxes-are-psychologically-akin-to-gambling?source=gaming.
\item \textsuperscript{36} Id.
\end{itemize}
A loot box mechanic that required excessive spending for a small chance of a reward. China has also taken steps to create legislation to regulate loot boxes. Moreover, Belgium and the Netherlands have indicated that they believe loot boxes are gambling. On the other hand, the United Kingdom and New Zealand have stated that loot boxes are not considered gambling.

One collaborative effort is the Gaming Regulators European Forum (GREF). Its mission is to gather European gaming regulators to discuss ongoing developments in the gaming industry, including gambling. The GREF has produced a declaration that discusses the “blurring of lines between gambling and other forms of digital entertainment such as video gaming.” The declaration was signed by sixteen gambling regulators total. Unfortunately, the signing of the declaration does not establish a legal precedent that meaningfully regulates loot boxes. Despite the tide seeming to roll in the direction of regulation, one video game publisher has taken a stance against the anti-loot box legislation abroad.

EA Sports uses a loot box mechanic. Issues arose for EA when the Belgian gaming commission determined that loot boxes were illegal. While other publishers removed the loot box option from their games, EA decided to keep the mechanic in the FIFA video game.

38. Id.
39. Id.
43. The declaration reflects the shared concerns of its signatories, which include Latvia, Czech Republic, Isle of Man, France, Spain, Malta, Jersey, Gibraltar, Ireland, Portugal, Norway, Netherlands, United Kingdom, Poland, Austria, and Washington State. See id.
44. See Santangelo, supra note 27 (providing the statement of the Ireland Department of Justice Minister of State, David Stanton).
46. Id.
47. Id.
48. Id.
action has been taken yet, but Belgium’s prosecutor is currently investigating EA to determine whether there is a case.\(^{49}\) The outcome of this case will certainly have a global effect since it will be one of the first loot box legal battles.\(^{50}\)

At the time of this Note, the industry has not challenged the legality of any state legislation passed in the United States.\(^{51}\) Video Game Industry representatives assert that loot boxes are not gambling. In support, they propose two arguments: (1) each time a player purchases a loot box, he or she receives something in return, and (2) no player is required to buy or use a loot box to play the game.\(^{52}\) While such considerations should grant pause in the minds of legislators and readers, those two arguments are not sufficient to distinguish the loot box from gambling.\(^{53}\)

Beginning with the first argument, simply receiving something in return does not by itself create a distinction. Rather, the proper distinction should focus on the concept of consideration, which serves as the foundation of contract law.\(^ {54}\) The loot box mechanic thus falls under the auspice of contract law and it should be treated as a contract. Is the player always receiving something of equal or similar value in exchange for his or her money? Is there a return promise? In the case of loot boxes, the answer is most likely no. Consider the slot machine: players insert a dollar and receive something in return, even if it is sometimes only twenty-five cents. Similarly, the selection of a loot box is entirely random and involves nothing but a computer code.\(^ {55}\) Players may receive items


\(^{50}\) See Whitman, supra note 45.

\(^{51}\) At the federal level, the United States declared that loot boxes are not gambling. At the state level, however, some states have decided the mechanic is gambling and have enacted legislation accordingly. Compare Whitman, supra note 45, with Bailey, supra note 24.

\(^{52}\) See Bailey, supra note 24.

\(^{53}\) See id.


they already have or an item they do not want.\textsuperscript{56} This lack of consideration makes a loot box comparable to a slot machine.

The second argument, focusing on the requirement to purchase loot boxes, is almost negligible. Individuals are never required to gamble at a casino, but still the industry is regulated.\textsuperscript{57} Video game players are indeed able to enjoy the in-game content without partaking in the loot box mechanic. But the desire to stand out in the virtual world—either aesthetically or through superior performance—often entice players to acquire the in-game currency required to purchase the loot boxes.

Loot boxes are also considered gambling because of the similar psychological effects. A study performed in Australia examined the psychological enticement to gambling.\textsuperscript{58} The study was performed on behalf of Australian legislators to determine the appropriate legal status of video game loot box mechanics.\textsuperscript{59} The study discovered that those who already had a serious gambling problem were more inclined to spend money on loot boxes.\textsuperscript{60} The report also mentioned that the loot box mechanic can serve as a “gateway” to developing a gambling addiction.\textsuperscript{61}

The very design of the loot box mechanic purposefully persuades players to “buy just one more.”\textsuperscript{62} Some video games, such as Fortnite, are designed to be addictive even without a gambling mechanic.\textsuperscript{63} In fact, video game addiction is increasing in frequency.\textsuperscript{64} Experts have developed detox methods for overcoming a video game addiction.\textsuperscript{65} Video game addiction has even been considered to be similar to “compulsive gambling.”\textsuperscript{66} The video game user experiences elevated levels of dopamine, which is connected with experiencing something

\textsuperscript{56} Another interesting comparison to loot boxes is trading card packs. Purchasers are able to purchase a trading card pack and receive cards he or she already has or cards he or she does not want.


\textsuperscript{58} Prescott, \textit{supra} note 34.

\textsuperscript{59} \textit{Id.}

\textsuperscript{60} \textit{Id.}

\textsuperscript{61} \textit{Id.} (citing the “excitement” to become associated with gambling, which would lead to additional gambling).

\textsuperscript{62} Alexandra, \textit{supra} note 26.


\textsuperscript{65} \textit{Id.}

\textsuperscript{66} \textit{Id.}
unexpected and positive.\textsuperscript{67} Moreover, the opportunity to enter a new world and temporarily escape from reality also contributes to the development of an addiction.\textsuperscript{68} Parents have also felt the addiction, stating they lost their children to video games.\textsuperscript{69}

Now, factor in the loot box mechanic: players are able to try their luck at winning a grand prize in their own fantasy world. The fantasy world now also contains the excitement and psychological effects of gambling. An individual who has to play just one more time to win back their losses demonstrates the gambling addiction.\textsuperscript{70} This parallels the loot box mechanic, which makes the player feel the need to open an additional box to earn a special item and justify any money spent. It is that parallel that is motivating state legislators—and legislators in other countries—to enact laws to prevent children from accessing this sort of mechanic.\textsuperscript{71}

The loot box situation is additionally dangerous because children are easily impressionable. Children are especially vulnerable to the emotional rush of loot boxes and to the endorsements of popular YouTube vloggers and celebrities who are promoting loot boxes.\textsuperscript{72} Studies show that parents have a significant effect on the development of children.\textsuperscript{73} When that influence is replaced by loot boxes and celebrities, children have little opportunity to avoid the addiction of gambling. New

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\textsuperscript{68} Rauh, supra note 64 (“[A]n intelligent child who is unpopular at school can ‘become dominant in the game.’”). Reality for children can be much more difficult than fighting a battle online. It was reported that 49% of children in 4th to 12th grades reported being bullied once over a one-month period. Catherine P. Bradshaw et al., Bullying and Peer Victimization at School: Perpetual Differences Between Students and School Staff, 36 SCHOOL PSYCHOL. REV. 361, 368 (2007).


\textsuperscript{70} Compulsive Gambling Symptoms, Causes and Effects, PSYCHGUIDES, https://www.psychguides.com/guides/compulsive-gambling-symptoms-causes-and-effects/ (last visited Sept. 20, 2018) (“If you feel like you need to try just one more time . . . it is highly likely you are suffering from a gambling addiction.”).

\textsuperscript{71} Alexandra, supra note 26 (quoting Hawaiian and New Hampshire senators). MacDonald, supra note 20 (providing an anti-loot box quote from the Belgian Minister of Justice).

\textsuperscript{72} MacDonald, supra note 20 (“‘Mixing games and gambling, especially at a young age, is dangerous for mental health . . . ’.”).

\end{flushleft}
Jersey courts have held that children should not be able to enter casinos. Such legislation demonstrates a state’s interest in preventing children from gambling exposure.

One example of a celebrity promotion is YouTube celebrity, “Ninja,” wanting a loot box in Fortnite. Ninja creates YouTube videos of himself playing various video games. Famous for his over-the-top behavior, Ninja has over 22 million subscribers on his channel. This figure does not include any of his videos that are located on other channels. This also does not take into account his presence on the game streaming website Twitch. His income of roughly $500,000 a month demonstrates his influence.

It is important to note that the industry is self-regulating. For example, the Entertainment Software Rating Board (ESRB) was originally created to address video game violence and assign ratings for games. The ESRB itself does not have much authority to regulate the video game industry. It predominately provides advisories to video game players, such as a “game rating.” The game ratings range from “E” for everyone to “M” for mature and indicate any controversial elements of the game.

The ESRB now requires labels indicating games with in-game purchases. The label requirement will apply to games with various

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75. Id.; see N.J. ADMIN. CODE § 5:12-119(a) (2019).

76. Fortnite Records, Ninja Wants a Ninja Loot Box in Fortnite, YOUTUBE (May 3, 2018), https://www.youtube.com/watch?v=YVYOsdjO7Q.


80. Joe Colquhuon, Fortnite Streamer Ninja Makes $500k per Month, PC GAMES

81. Good, supra note 22.

82. Id.

83. Id.


in-game purchase mechanics including the loot box, season passes, subscriptions, and bonus levels. Whether or not ESRB took this initiative based on its own desires or from social pressure is unclear.

Apple is taking its own approach by requiring that publishers disclose the statistics behind loot boxes. Specifically, any application that provides “randomized virtual items for purchase must disclose the odds of receiving each type of item . . . .” Apple, the first major company to require publisher disclosures, has already applied this requirement to major games such as Heartstone. It is likely that this rule will also apply to the iOS version of Fortnite.

The reception of the labeling requirement is divided. Some believe the actions are not enough. By grouping the loot box mechanic with general in-game purchases, this approach is not giving parents and individuals enough information to act accordingly. One study demonstrated that even if parents knew what a loot box was, they did not fully understand what the loot box entailed. Part of the international effort is to ensure parents understand the risk of loot boxes as well as unlicensed third party attempts to sell loot boxes to children. Authorities are attempting to crack down on the issue through parental education and involvement. Information will allow parents to make the decision regarding the child’s exposure to loot box mechanics in video games, ranging from unrestricted access to absolute prohibition.

On the other side of the argument, a developing campaign contends the parental controls available in the video game console are sufficient to handle the issue. The actual video game consoles have expanded


87. See Alexandra, supra note 26 (noting that a New Hampshire senator called for ESRB action).

88. Id.


90. Id.

91. Good, supra note 86.
92. Id.
93. Good, supra note 22.
94. Wade, supra note 40.


96. Good, supra note 22.
parental controls that prevent children from purchasing in-game content with real world currency. With the lack of regulation, the ESRB recommends that parents take advantage of these controls. Unfortunately, a parent is not always aware of the parental controls. Additionally, some “technologically savvy” children are able to disable parental controls. Thus, such an approach is not a viable solution.

One possible action some video game publishers have already taken is to disclose the “drop rates” of their loot boxes. Some companies, possibly hoping they can get in front of any legislation and win the admiration of their customers, provide players statistics of the likelihood of winning a certain item. The disclosure of the loot box system may also allow publishers to keep their products in foreign markets. For example, a regulation in China prohibits the sale of any game that does not provide the probability of obtaining an item from a loot box. As noted above, Apple has done something similar, and Google has as well.

The loot box mechanic is not going away. Video game developers and publishers have been improving video games overall, but they have not raised prices despite the sharp increase in the cost of developing video games, which is now roughly ten times more expensive than before. Loot boxes are one approach that these companies have taken to raise the revenue. For example, Activision Blizzard made approximately half of its $7 billion revenue from microtransactions in general. Moreover,


98. See Good, supra note 22.


102. Nordmark, supra note 37.


104. MacDonald, supra note 20 (noting that games have stayed at the same $50–$60 price range over fifteen years).

some developers implement loot box mechanics to keep pace with their competitors.\textsuperscript{106}

Aside from the likeness to gambling, the general gaming community dislikes the loot box mechanic. Publishers have experienced severe backlash from their customers when the loot box was too central to the game. The most recent example occurred in EA Star Wars Battlefront 2.\textsuperscript{107} Battlefront’s progression system seemed to require advantages obtained either through a direct purchase or through the purchase of loot boxes. In-game purchases let players skip ahead to the access of major characters of the Star Wars universe as well as to purchase character improvements.\textsuperscript{108} In other words, the purchase of loot boxes allowed players to skip earning in-game currency through the traditional method of playing the game, dedicating time and effort, and competing against other players. The frustration was heard on social media and online forums such as Reddit.\textsuperscript{109} The gaming community backlash and criticism eventually led EA to remove the mechanic.\textsuperscript{110} The removal was even accompanied by an apology from an EA executive.\textsuperscript{111}

While the long-term social effects are still unclear at this point, the increased exposure to sports betting may normalize gambling. Loot box mechanics, whether legally classified as gambling or not, have the same psychological effects as gambling. If gambling is more socially acceptable, the likelihood of successful loot box mechanic regulation might decrease. Conversely, the possibility of exposing children to loot box mechanics and the psychological effects of gambling increases. Even worse, parents will have no idea what their children are being exposed to.

\textbf{III. CONCLUSION}

Loot boxes are a new development, along with the rise of in-game purchases in general.\textsuperscript{112} Since these mechanics are so new, legislators and the general public are unaware of what they are or how to treat them. General in-game purchases, while aggravating to some, do not involve

\begin{footnotes}
\item[106.] Id.
\item[109.] Kim, \textit{supra} note 107.
\item[110.] Id.
\item[112.] Activision Blizzard reported billions in revenue in each quarter. Nordmark, \textit{supra} note 37.
\end{footnotes}
much danger other than a higher credit card bill. However, loot boxes are
different because they mimic gambling and should be regulated as such.

The world has been slow to respond. Loot boxes have been active for
several years now, but very few countries have taken action to address
the mechanic. Several states have started to address the issue, but most
legislation that has been proposed has yet to be adopted or to take effect.
Meanwhile, the effects of loot boxes, in terms of addiction, are being
documented. Video game developers mainly target children despite their
inability to understand the mental effects of loot box mechanics. Despite
a nation-wide acceptance of the prohibition on underage gambling, it
seems as if there is an apathy to virtual gambling with real money.
Perhaps it is the virtual separation that justifies loot boxes? Users are not
directly gambling, but gambling through their virtual identity with their
real-world money. Regardless of how they are viewed, loot boxes should
be statutorily regulated. Any applicable laws would not regulate the
general game, just the ability to access the loot box mechanic.
Additionally, parents should be educated on what is going on in their
children’s lives.