Journal of Business Ethics
https://doi.org/10.1007/s10551-019-04159-y

ORIGINAL PAPER

Ayn Rand's Objectivist Ethics Applied to Video Game Business

J. Tuomas Harviainen[1] · **Janne Paavilainen**[1] · **Elina Koskinen**[1]

Received: 21 November 2017 / Accepted: 10 April 2019

Abstract
This article analyzes the business ethics of digital games, using Ayn Rand's philosophy of Objectivism. It identifies different types of monetization options as virtuous or nonvirtuous, based on Rand's views on rational self-interest. It divides the options into ethical Mover and unethical Looter designs, presents those logics in relation to an illustrative case example, Zynga, and then discusses a view on the role of players in relation to game monetization designs. Through our analysis of monetization options in the context of Objectivist ethics, the article contributes to discussions on game revenue ethics. It also expands the still understudied area of applying Rand's ethics to business, in the context of a new sector, game development, and business. This research enables ethicists to apply a wider-than-before perspective on virtue ethics to online business, and helps game developers act in a virtuous manner, which provides them with a long-term business advantage.

Keywords Free-to-play · Games · Ayn Rand · Business ethics · Monetization

Introduction

In this article, we continue the trend of analyzing the design and business logic of digital games, especially free-to-play (F2P) games, by means of one major ethics theory at a time (e.g., Heimo et al. 2018). With it, we seek to provide our readers with reasons and guidelines for ethical action, which is important for long-term efficiency, customer value, and even personal endurance in the highly competitive and stressful business of game design (O'Donnell 2014; see also Keinonen 2017). F2P is a revenue model where games[1] are distributed and played free-of-charge, while players are monetized, in particular, via real-money transactions (RMTs) and in-app purchases (IAPs) during game play. In such games, people pay money for such things as extra content, competitive advantages, or to skip boring parts of a play experience (Harviainen et al. 2018).

Recent works have explored the monetization ethics of digital games from the point of view of Moor's ethics of just consequences (Kimppa et al. 2015; building upon Moor 1999), and Aristotelian virtue ethics (Heimo et al. 2018). This article takes a slightly more radical path; Ayn Rand (1905–1982) is controversial as a philosopher and ethicist (e.g., Gladsteim 1999, ch. 5; Salmieri 2016). Nevertheless, the influence of her philosophy of Objectivism and its ethics (also known as *rational egoism*, a phrase which we will be using as a synonym for Objectivism throughout this article) on current-day conservative and libertarian thinking, particularly in the United States, is hard to deny (e.g., Allison 2013; Brook and Watkins 2012). Objectivism is, therefore, an increasingly important subject of serious study within both business ethics and national economics research. Several cases of academic applications of Rand's Objectivism to business ethics already exist (e.g., Drake 2016; Locke and Woiceshyn 1995; Simpson 2005, 2009; Woiceshyn 2011, 2012). Here, we apply the approach and insights provided by such works into a new arena: the contemporary topic of games as business phenomena.

This article examines videogame monetization in the context of Rand's ethics of Objectivism (further described below). We show that even when selfishness is considered a virtue, many shades of grey exist. Some forms of applying rational egoism are far more virtuous than others. Many of

✉ J. Tuomas Harviainen
tuomas.harviainen@tuni.fi

Janne Paavilainen
janne.paavilainen@tuni.fi

Elina Koskinen
elina.m.koskinen@tuni.fi

[1] Tampere University, Tampere, Finland

[1] For the sake of readability, we often use the word "games" to denote digital games in general. "Social games," in turn, is in this article used to mean digital games played on social network services such as Facebook. Some of them, but not all of such games, are also F2P games.

Published online: 16 April 2019

the possible variations relate to differences between monetization types and design decisions. Analyzing those, we answer the research question: **Which types of F2P monetization would Rand's Objectivism consider virtuous, and what does that mean for game developers and players?**

We show that various levels of virtuousness exist within monetization, and suggest ways for designers to be more virtuous, providing a long-term business advantage (Woiceshyn 2011). We add to the ongoing discussions on the ethics of software sales and online business ethics (e.g., Koehn 2003; Kracher and Corritore 2004; Laczniak and Murphy 2006), business egoism (e.g., Ramanathan and Swain 2017), and the ways in which digitalization affects consumer identity (Belk 2013). We accomplish this by identifying new viewpoints based on rational egoism, and thereby provide new knowledge on rational business behavior and the advantages it brings to game developers.[2]

Studies on the business ethics of game monetization are still rare. Most of the few studies that have been made since the beginning of the F2P era (Davidovici-Nora 2014) have discussed only challenges, not solutions. Examples of topics include: monetization design (e.g., Jordan et al. 2016; Harviainen et al. 2018); pseudo-randomized, gambling-like "gacha" (or "loot box") content sales mechanics, (Koeder et al. 2018); the selling of player information to third parties and the luring of existing players to virally recruit more players (together called "player commodification" by earlier researchers; e.g., Nieborg 2015, 2017); and workforce exploitation in game production (O'Donnell 2014). The two works on applying the ethics of Aristotle (Heimo et al. 2018) and Moor (Kimppa et al. 2015) on game monetization are the key exception, and form the research basis upon which this article builds its monetization typologies.

As its inspiration, this article takes Heimo et al.'s (2018) observation that some F2P game developers may not want to be virtuous. Instead, they may just want to make as much money as possible. The second starting point is Alha et al.'s (Alha et al. 2014) finding that not all developers agree on what can be considered ethical in the context of monetization. We expand from these two angles, to study what happens if monetization is considered a positive thing. However, we argue here that it is positive only when it is accomplished virtuously.[3]

From what is stereotypically and inaccurately thought of as a Randian perspective, all money-seeking activities is supposedly considered virtuous, including cases of exploitation. This is a false, if persistent and popular, interpretation of Rand. Greed, in the sense in which it is defined by rational egoism, is *never* good. Rational self-interest is virtuous behavior that helps one prosper. Greed is the unethical, irrational pursuit of things to which one does not have any right. (Smith 2006, pp. 217–220; Woiceshyn 2012, pp. 111–113). The pursuit of wealth, as an expression of productiveness, is ethical. Dishonest means of acquiring or hoarding wealth are not. The everyday use of the word "greed" confuses these two concepts, which is why it should not be used at all (Woiceshyn 2012, p. 113).

In Objectivism, the purpose of ethics is to help humans survive and to flourish (Peikoff 1991; Rand 1964). Greed, as defined in Objectivism, does not accomplish that purpose, at least not in the long run (Woiceshyn 2012). Rand herself would likely consider every dishonest game developer to be a stealing "Looter." In turn, only a rare few player-praised F2P game companies (e.g., Riot Games, the creators of *League of Legends*) would consist of the kind of heroic figures that Rand calls "Movers" in her book *Atlas Shrugged* (1957).[4] In this article, we use those terms to describe the ethical status of different monetization options.

In the following sections, we examine F2P business logic typologies from the perspective of rational egoism. We contribute to wider discussion on business ethics by means of F2P games as an example of how rationally applied selfishness can be perceived as virtuous. The article first discusses the principles of Rand's philosophy, Objectivism. Then, it presents previously identified videogame monetization types from the perspectives of what we consider Mover and Looter revenue models. Following that, it examines an illustrative example case, Zynga, which has at different times exemplified both exploitation and Objectivist virtues. In the Discussion section, the article looks more thoroughly at the challenges of ethical monetization, and then concludes with a summary and remarks on the implications that its findings have for the business ethics of game design.

[2] For the sake of readability, we use the words "developer" and "designer" here to denote people involved in the creation and updating of a game, and do not elaborate upon all the different roles that game development teams actually contain (O'Donnell 2014, for details). Likewise, the publisher of a game can be different from the developers of that game, and make monetization decisions of their own, demanding changes from the developers.

[3] When we speak of something in this article as ethical or unethical, or as virtuous or nonvirtuous, we will be using those terms always in the context of Objectivist ethics unless otherwise explicitly noted. This the same approach that Heimo et al. (2018) used in discussing the concepts in the context of Aristotle.

[4] Many concepts in this article, including the categories of Movers and Looters, are drawn from Rand's fiction. Rand herself noted in her preface to *For the New Intellectual* (1961) that some key parts of her philosophy were expressed in her novels, in places like the speech of John Galt in *Atlas Shrugged* (1957). We have therefore chosen to include references to Rand's fiction as well, in cases where that contributes to the argument at hand.

Rand's Objectivism and Ethics

Ayn Rand's Objectivism is not the same philosophical view as the more commonly known objectivist school of philosophy or the objectivity of science (e.g., Popper 1972). For Rand, people are objective when they act based on reality and rationally pursue their own selfish goals, trying their best to excel. In Objectivism evasion—the deliberate refusal to acknowledge reality—is a mortal sin (Smith 2006, p. 63). Rand's philosophy, which is far too complex to properly summarize in a single article, is a system of virtue ethics (e.g., Peikoff 1991; Gotthelf and Salmieri 2016). Some of her virtues are quite different from those of, say, Aristotle, who was nevertheless a significant influence on Rand's work. For example, Objectivism sees all altruism as involving self-sacrifice, and thus as unethical. Acting against one's own interest by giving up values does not promote one's chances of survival and prosperity, and survival is the reason for which ethics exist, and why they are important to follow (Rand 1964).

For Objectivism (e.g., Rand 1964, pp. X–Xi; see also Peikoff 1991),[5] virtuous selfishness is a question of *rational* self-interest. It requires one's awareness of both ethical principles and that which would be rational for oneself. One has to acknowledge objective reality and to act based on that acknowledgement. In order to survive and to thrive, humans need value from things such as food and beneficial social relationships. That value, Rand (e.g., 1964) argues, is gained by means of reason to identify the necessary moral principles, including virtues. By acting virtuously, one gains value. Selfishness is '*not a license "to do as [one] pleases"*' (Gotthelf 2016). Being virtuous is an issue of both action and nature. Like Aristotle (350 BCA; see also McPherson 2013), Objectivism believes that only when one follows virtues by nature, having internalized them, one is truly virtuous (Rand 1957). Being virtuous is a choice made for life, not just for a singular situation, and following virtues makes one more likely to thrive and prosper.

To exercise their virtues and to innovate (e.g., Rand 1964), humans need freedom, which enables reason to function and to seek new solutions. This requires the absence of all forms of coercion by force, and fraud, that can prevent free decision-making. For Rand (e.g., 1961) governmental regulations are also a type of force and thus, by default, harmful. Life should be managed through one's own efforts and free trade with others, following the "Trader Principle," in which the parties connected to a trade define the value of each exchange (Wright 2016). Value is traded for value, in mutual agreement, for mutual benefit (Woiceshyn 2012). The intentional delivery of a faulty product or service is a form of fraud, as is not paying an agreed-upon price. As Rand (1964, p. 60) states, *"When a man trades with others, he is counting—explicitly or implicitly—on their rationality, that is: on their ability to recognize the objective value of his work. (A trade based on any other premise is a con game or a fraud.)"*

We believe that free-to-play games illustrate an interesting borderline case for Objectivism; some forms of their monetization are based on delivering a less than optimal service, yet they are for the most part distributed freely. What is thus "fair" trade in their case is harder for the participants to define, because value propositions in the potential trade are unclear or hard to assess. Can we, for example, consider extremely popular games such as *FarmVille* (Zynga 2009) or *Pokémon GO* (Niantic 2016) to be "bad" designs, or frauds, if millions of people find them enjoyable? *FarmVille* and other social games featured many playability problems (Paavilainen et al. 2013; Paavilainen et al. 2015) and *Pokémon GO* had many functional problems related to GPS tracking, application crashing, and battery consumption (Paavilainen et al. 2017).

Monetization and Games

Digital games, especially F2P games, are particularly suitable cases for the application of business ethics that address monetization (Heimo et al. 2018). In order to generate revenue, many designers are intentionally luring players to pay, bombarding them during play with commercial ads and payment options which hinder the play experience, in order to wear down resistance to buying (Paavilainen et al. 2013; Paavilainen et al. 2015; Nieborg 2017). Furthermore, they may be making unethical decisions by employing the so-called dark patterns (i.e., exploitative elements; see Zagal et al. 2013 for details) in game design. In other words, they are not making the "best game possible," as far as service quality and play experiences are concerned (Heimo et al. 2018). This does not mean that each designer should aim for a perfect Platonic ideal of a game, but rather that many designers are now intentionally including hindrances or psychological traps (Hamari 2011) in their games, at the expense of optimal gameplay, in order that players would be more likely to pay more.

From the player's perspective, a designer's self-interest (colloquially called erroneously, of course, "greed") is supposedly never good—at least not if one looks at bitter player commentaries on discussion fora. From an Objectivist perspective, designer self-interest is a good thing. A game that

[5] For the sake of readability, this article refers to Rand's non-fiction essays as parts of the books in which they were published, instead of using each original year from e.g., the *Objectivist Newsletter*. Given that there is not much theoretical development between them, and because they were mostly written within the span of a handful of years, we do not differentiate each essay here.

sells well is probably a good product and provides mutual value. It is quite unlikely (though not impossible) that massive sales could be accomplished by customers' unawareness of what exactly is a quality product. A high-selling game, no matter how well it was made, fulfills some customer need or desire. This is especially true, if a game's popularity persists beyond the initial rush that can sometimes be created purely with hype.

Many types of monetary transactions exist within digital games (Harviainen et al. 2018; Lehdonvirta and Castronova 2014). For F2P games, relevant terms include *monetization* (producers earning money one way or another through the game), *real-money transaction* (RMT, the use of real-world money to buy something—typically premium in-game currency), and *in-app purchase* (IAP, the use of in-game premium currency to buy something of value within the game).[6] Players may additionally engage in trading of many kinds, and player-to-player markets usually evolve in multiplayer digital games. This happens even in cases where such markets are officially prohibited by the publishers of the games (Lehdonvirta and Castronova 2014). In this article, we nevertheless focus on value issues relating to monetization, RMTs and IAPs, and not on player-to-player trading.

From the perspective of game design ethics (Sicart 2009, pp. 127–142), it can be argued that all elements connected to the play within the game's information system can be seen as part of that system, including virtues and values. RMT is therefore a part of the game, and players accept that when they choose to play that specific game, even if they never spend money on it. RMT may not be a factor that they like (e.g., in cases of pay-to-win mechanics), but they nevertheless accept its presence.

This is where Objectivist ideals become applicable: if we agree that F2P games are meant to make money for their developers and publishers, the key question is whether the designers are creators who provide something significant. They may, instead, be people who profiteer by means of psychological traps to lure players to pay, people who just create inferior copies of others' works, or people who ask for money or attention through appeals to emotion and downright begging. These can vary from game to game, and unethical business practices may also take place outside of play. For example, if the publisher of a Facebook game attempts to influence the content policies of Facebook itself, it would probably be considered an unethical market strategy.

In this article, we slightly deviate from Objectivism's original viewpoint in that we believe that exploitation, in the form of luring people to pay, may also constitute unethical behavior. Rand (1957, 1964) states that coercion is only based on physical threats, however, we here take the approach that the use of methods which take advantage of peoples' inherent weaknesses in decision-making also constitutes a type of fraud. This is especially pertinent in relation to the inability to abandon sunk costs and leave a problematic activity (Kahneman and Tversky 1974; Thaler and Sunstein 2009), as such techniques remove rationality from decision-making.

Heimo et al. (2018) divide game monetization options into three broad categories: *traditional*, *pay-while-playing*, and *content and access.* These further divide into smaller categories, discussed below alongside their ethical challenges. Other typologies exist (e.g., Hamari and Järvinen 2011; Lehdonvirta and Castronova 2014), but we believe that this system best exemplifies the nuances of Objectivist viewpoints. It enables the examination of e.g., digital versions of planned obsolescence, the sales of incomplete products as "ready" (as opposed to the ethical use of early versions in market testing), and so forth, all of which by Objectivist standards are unethical practices (e.g., Rand 1963).

Before we further discuss monetization, it must be noted that the F2P games market is already saturated with what Objectivism would consider "Second-Hander" games. Most of them are unoriginal copies of well-known works, and are typically advertised on social media (Van Roessel and Katzenbach 2018). From an Objectivist perspective, those copy-games fit the definition of passing something commonplace and derivative as radical and new, and are thus unethical. Given their copycat nature, this article will not examine those games at any length, and will instead turn to the monetization strategies that their developers likewise copied from the designers of the original games. For the sake of consistency and convenience, we will talk of Mover and Looter revenues, but as our case example later shows, some developers may also exhibit unethical practices other than Looting, including Second-Hander copying.

Mover Revenues

Movers are people who exemplify Objectivism's virtues: rational self-interest, human prosperity as the standard of value, productiveness, honesty, pride in one's own accomplishments, independence, integrity, and justice. Justice includes the Trader Principle of conducting just and fair business on a free market. Rand acknowledged the existence of many paths to that goal. The business plans and revenue models of her fictional protagonists are very different from one another, yet all of them are considered virtuous by Rand (e.g., Rand 1943, 1957). Many types of ethically sound game monetization types also exist.

[6] IAP can also in some cases take place in direct transactions of RMT–IAP, without conversion to in-game premium currency.

The most ethical game revenue models are, for Objectivism, in the same categories that Heimo et al. (2018) identified as the most virtuous in the Aristotelian sense. Their monetization methods come from the "Traditional" category, especially its sub-categories "Pay once," "Pay periodically," "Freeware," "Shareware," and the further divisible and more ambiguous "Lure-to-p(l)ay." Excluding "Freeware," these are all categories in which a complete or regularly updated game is provided in exchange for money.

In "Pay once," the players pay for the full game. It can be purchased from either a physical store or an online marketplace such as Steam. At a quick glance, this would seem the perfect Objectivist option: a complete play environment, sold as one item, and allowing players to master it according to their skills. Nevertheless, a problem exists: whereas an indestructible frying pan (Rand 1957) would preserve its value forever, interesting game content may run out. This is especially likely in *games of progression*, games which move towards completion (or at least advancement) through play (Alha et al. 2018). A "perfect" progression game can still be Objectivistically viewed the same way as a well-made good: it is something that fulfills all needs related to its area of use for a long time, and thus frees an individual's purchasing power to be applied elsewhere. Yet its value-in-use probably decreases over time. Since such a game can be compared to things such as consumer goods or good movies there is no real ethical problem. Many F2Ps nevertheless try solving the value-decrease problem through rules and designs that foster interaction. In such *games of emergence*, other players create increased, often unpredictable interaction that works as a guarantee of further content (Juul 2002), which emerges from the infinitely varied activities between players (e.g., attacks by other players in *Clash of Clans*).

A well-supported "Pay periodically" game fulfills Objectivism's expectations almost perfectly. A company providing masterful new content in a timely fashion at an optimal price (typically a monthly fee) allows the player to make purchasing decisions on a regular basis, to evaluate the product continuously, and to even influence the game design in some cases (Czarnota 2016; Lehtonen and Harviainen 2016). Compared to the "Pay once" model, games for which people periodically pay tend to keep their value due to updates. The ethical problem with this model is that it plays on loss aversion and sunk costs, since the players are essentially paying (in time and/or money) for continued access to the results of their own efforts (Hamari 2011). If they stop playing the game and stop paying for it, their earlier activities within that game are rendered without direct value to them. Periodically paying play behavior can also lead to clinical problems such as an internet gaming disorder (King and Delfabbo 2014).

"Freeware" is a more challenging model. In it, the developer freely distributes a game due to some goal. It therefore represents the very altruism and free distribution that were anathema to Rand (e.g., 1964). If, however, the designer is distributing the game out of rationally egoistic pleasure-giving reasons, such as one's own sense of pride in a good product or a desire for self-expression (Smith 2006), no ethical problem exists. Likewise, if the game is given freely as an investment for future gain (e.g., as a demonstration of one's skill before making another, monetizable game, or as a work sample for potential employers to see), no ethical conflict exists with one's intent for personal prosperity.

Freeware in many ways exemplifies the challenge of F2P monetization to Objectivism, while also embodying Objectivism's virtues: freeware (and F2P in general) are excellent marketing methods. At the same time, however, whenever people get something for free, even just a part, they become more reluctant to pay and more eager to get even more parts for free. Whether this is seen as "entertainment socialism," in which a monetizable minority pays for the play of the rest, or as just market forces of demand in action, depends on the interpreter in question. "Shareware" tries solving this conundrum with the idea that only a selected part (the first levels of a game; a limited set of weapons) is free. The player has the option of buying the rest of the content, usually as a single purchase (Heimo et al. 2018), turning the situation then to "Pay once." This can be very honest marketing, when done correctly, and is then perfectly aligned with Objectivism's ideals of fair trading. "Lure-to-p(l)ay" uses a similar approach, offering content for free until a certain point, at which sunk cost fallacies and other psychological tricks are deployed, so that the player wants to spend money in order to keep playing (Hamari 2011). The difference between Shareware and Lure-to-p(l)ay is that in Shareware, the amount of content available for free is explicitly stated before playing. In Lure-to-p(l)ay, the player will encounter sometimes quite surprising points at which the designers are trying to get them to pay for more. If this is done in a dishonest or exploitative way, the model becomes the unethical "Lure-to-pay" (see below) instead. In the best cases, it is an extremely efficient combination for ethical monetization, one that the players will appreciate, and in which they want to pay in order to not just get more content, but to also reward the designers for a job well done, in order to inspire them to provide even more value (Alha et al. 2018; Harviainen et al. 2018).

From the perspective of the designers and publishers, the important issue is whether a player can be incited to make their first in-app or content purchase. Only 5% of players are willing to pay real money, e.g., in-app purchases (Lehdonvirta and Castronova 2014). Even a single, initial RMT purchase significantly lowers the threshold of spending again, as long as the game remains at least as good as it was before (Luton 2013). From an Objectivist point of view, selling good content is clearly virtuous. The situation is ethically clearer in the case of downloadable content (e.g., new

expansions to a previously purchased game) than it is in the case of micro-transactional F2P in-app purchases, the value of which is harder to evaluate beforehand.

A central point of ethics for in-game purchases is that of what exactly is bought with the real money. For example, on markets for virtual goods (e.g., Hamari and Lehdonvirta 2010; Lehdonvirta and Castronova 2014) far superior ammunition may make a combat game too imbalanced (Heimo et al. 2018), as is discussed below. That, in turn, may lead the developers into creating increasingly less skill-based gameplay in order to sell more virtual goods to players looking for competitive advantages (Paul, 2018). Likewise, the heavily debated "loot box" or "gacha" mechanics, in which players pay real-world money to get to open randomized packages of additional content, are like gambling systems in which players do not know how much they will need to pay for the complete product after having already made an initial purchase. Suspicions also exist that the companies in charge of such games may alter the content of purchased boxes before they are opened. (Koeder et al. 2018.)

On the other hand, the sales of purely cosmetic elements and nothing else in games like *DOTA2* (Valve Corporation 2013) are completely in accordance with Objectivism. Such virtual items are fair trading par excellence.[7] Looter revenues, discussed next, are the opposite.

Looter Revenues

Looting is the use of unethical tools such as force, theft, fraud, cronyism, and/or appeals to gain access to others' belongings. First of the potential Looter[8] models is "Lure-to-pay." It is the most ethically complex of all monetization types, because all F2P games that include real-money trading are essentially Lure-to-p(l)ay or Lure-to-pay in some way (Heimo et al. 2018). In F2P research, "luring" refers to the ways in which some games are designed to entice people to keep playing and to commit more, and to eventually start paying when they feel they have committed too much to quit (Kimppa et al. 2015). As noted in the case of the closely related Lure-to-p(l)ay, luring means enough content is made available without pay, for the purposes of getting players to pay later.

Therefore, in Looter luring, progress is repeatedly hindered by artificial constraints, tailored frustration points, and unnecessary waiting (the "Pay-to-pass-boring" approach; see also *offline progress mechanics* from Paavilainen et al. 2013). This is where the "inferior product" issue appears, alongside factors such as the sunk cost fallacy (a type of loss aversion in which already paid costs are seen as lost if one does not receive the expected benefits; Arkes and Blumer 1985; Hamari 2011) and other psychological traps. Rand (1957) firmly opposed making money "by pandering to men's vices or to men's stupidity." Using methods such as taking advantage of the human decision-making flaws, discovered by psychologists and behavioral economists (e.g., Kahneman and Tversky 1974; Thaler and Sunstein 2009), in order to get players addicted and to deceive them regarding content value is clearly unethical.[9] In Lure-to-pay, designers explicitly and intentionally play (and prey) on human weaknesses, and turn what may look to an outsider like a case of free decision-making into exploitation. A person whose free decision-making is hampered by intentionally designer-fostered addiction or purposefully inflated loss aversion is no longer capable of exercising full volition. We, like Alha et al. (2018), consider such situations to be a type of fraud, especially when luring is utilized in a context where the developers provide insufficient or incorrect information on the potential value of a purchase (Švelch 2017).

A company in charge of a game may, furthermore, alter the rules (e.g., its End-User License Agreements, EULAs) at any time, on a one-sided basis, once players have been lured to commit to playing (Heimo et al. 2018). In our view, this is against Objectivism's concepts of fair trade. It may be argued that if customers do not read each new EULA version, it is their own fault, but with such documents often being both massive and frequently updated, we believe that such radical changes approach Objectivism's views on scamming, rather than any concept of fair trade.

The second problematic model is "pay-to-win," an extreme sub-type of "pay-while-playing." In it, players are given access to advantages, such as superior ammunition in *World of Tanks* (Wargaming 2010), through real-money transactions. In Objectivist terms, this limits nonpaying individuals' use of skill—but only if we consider the game on its own, as a closed system (Sicart 2009). If, however,

[7] It needs to be noted that players sometimes nevertheless turn these mechanics, too, into forms of gambling or exploitation between players. Some players furthermore make a living by converting such "useless" virtual cosmetic items, which they acquire as gifts through e.g., streaming their play online, back into real money.

[8] In most of Rand's text (e.g., 1957) "Looter" points to especially those who use force either directly or indirectly to get more than their fair share of trade. We include here the use of fraud and dirty tricks into that concept, for the sake of readability, instead of creating a larger typology.

[9] In terms of behavioral economics, Objectivism could be said to expect that people can and should evolve into the rational Econs of economic theory, from the flawed and inconsistent Humans that humans by nature are (e.g., Thaler and Sunstein 2009). Objectivism would also strongly object to the kind of paternalism inherent in many applications of behavioral economics by governments and other organizations (e.g., Kapeliushnikov 2015).

Table 1 A rough outline of monetization types by category

A: Predominantly mover	B: Predominantly looter
Pay once (if product is good enough)	Lure-to-pay by means of tricks that limit players' rational decision-making, or deception
Pay periodically	Pay for virtual goods (if to win or for imbalanced loot box options), when not made explicit to the players
Freeware	Pay-to-pass-boring
Shareware	False advertising
Lure-to-p(l)ay	Player commodification and not-agreed-upon data sales to third parties (including EULA manipulation)
Pay for virtual goods (if for more content or extra aesthetics)	

pay-to-win is seen as a part of the wider world and not just of the game-system, Objectivism would accept people using their wealth in the ways that they desire (Rand 1957). This brings us to ethically interesting territory: to what extent should we expect play to be separate from the surrounding reality? A traditional viewpoint would argue "completely" (Huizinga 1955; Salen and Zimmermann 2004). Gambling ethics studies (e.g., Cheng et al. 2017), in turn, would say that the two are closely tied, through clear and causally observable consequences. The Objectivist approach would be to say that since real-money transactions and in-app purchases are part of the game's concept, gameplay can and should also be influenced by the financial success of players outside the arena of play, the same as any other activity. (It should not, however, be influenced by e.g., user interfaces that lure children to use RMT without parental knowledge, which are clearly unethical in also Objectivist terms.) As Alha et al. (2018) note, animosity between players who engage in RMT and those who do not is quite common, reflecting the difference between those who emphasize skill and those who emphasize the ability to pay.

A clear-cut case can be found in the false advertising of games, which is simply fraud. Sometimes, however, developers honestly aim to create the best game possible, yet they fail to deliver (Kimppa et al. 2015; O'Donnell 2014). Initial trailers, crowdfunding campaign materials, and even pre-release versions may look great, but the final product can still be subpar. By that time, however, people will have invested their money into the failed project. They receive something, but not that which was supposed to be delivered. On the one hand, this is fair trade and risk-taking, appreciated by Rand (e.g., 1961, 1967). On the other hand, Objectivism condemns foolish risk-taking at the expense of others (Rand 1957). So while in Objectivist terms we can say that to take risks at the market is virtuous, the system should be set so that in the case of failure, debtors can attempt to reclaim their investments. In cases such as crowdfunded games, the backers are not risk-taking venture investors, but people who have made a pre-purchase on a promised delivery quality. They are customers expecting a fair trade.

What makes all these models ethically problematic is the aforementioned "inferior product" issue (Table 1 for a summary with some examples of exceptions). While the three first types in Column B of the table are not unethical by Objectivist standards per se, we argue here that they are too often in especially F2P games based on Rand's (1957) "pandering to stupidity." This is why we say "predominantly"—the same systems can be applied both ethically and not, depending on the manner of implementation, context, and the anticipation of social pressure. If it is open and fair trade, there is no ethical problem. If there is exploitation based on hidden information, a problem exists. In our view, the first three in Column B are also likely to contain elements that amount to fraud, due to the psychological traps applied in their design in order to make paying more likely. They can be applied in a virtuous manner, but they rarely are.

In Objectivist fair trade, everything is fine as long as the market is able to set the price. This creates two challenges. The first one is that within any game that is not sold as "Pay once," the developers can guide the in-game market as they see fit, with the players having only the options of either agreeing, or leaving the game and all their sunk costs and achievements within it behind (Lehdonvirta and Castronova 2014). This can be a very powerful market force, in situations where a game constitutes a record of past investments, potential new play affordances, and even one's primary link to one's social circles. Players have, as a result of this pressure, been observed as being extremely reluctant to change the games which they play (ibid.). A handful of rare but important exceptions exist, like *EVE Online*, in which some player groups are practically unionized and can exert significant market pressure (Czarnota 2016).

The second challenge is that many F2P games combine together marketing hype, psychological traps, player commodification, and sunk-cost fallacies. It is thus not always at all clear where the line of fair trade lies in cases of intentionally "bad" F2P designs. Some of those are in fact tools made to lure people to play them, others are just flawed attempts at producing something engaging and enticing. The price–quality range of such games is very difficult to assess at the time of the first few purchases (or when dealing with derivative,

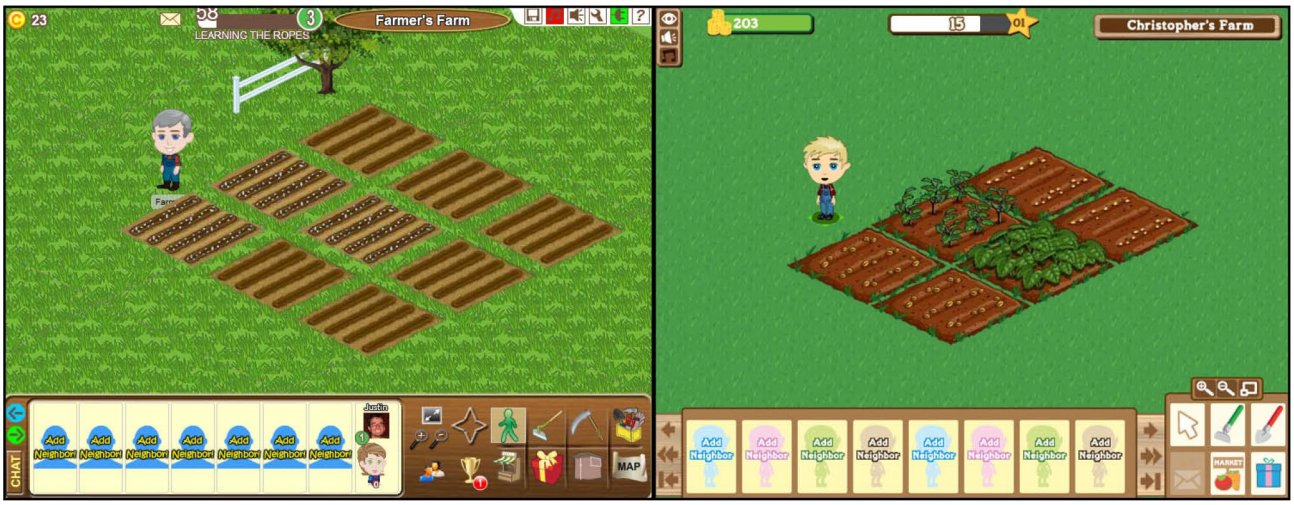

Fig. 1 Visual similarities between *FarmTown* (left) and Zynga's *FarmVille* (right)

copycat Second-Hander games). Due to such uncertainties, people are likely to make deals they will later regret (Bell 1982). This is very different from knowing that an Opel will cost less than an Audi and thus it will also feature fewer luxury perks.

Free-to-play games are monetization tools that rely on providing the feel of a great play experience while ensuring the players have enough problems in progressing, in order that those players will spend money and not just time and effort to bypass the problems (Harviainen et al. 2018). Only a very rare few games are able to elicit enough revenue with players just "rewarding" the designers with money because they like the game (instead of e.g., paying for a play advantage or the removal of an obstacle). Likewise, very few games can focus solely on monetizing via cosmetic items that do not affect gameplay (Heimo et al. 2018). Instead, the games have to use abovementioned systems to create situations where the players will feel a desire or even a *need* to play. Thus, they function on the borderline of Lure-to-p(l)ay, and Lure-to- pay. We will next discuss the implications this has for the customers themselves, using an illustrative example case.

Case Example: Zynga

Here, we look at a key case example from the F2P social network games industry. Zynga is an American video game developer and publisher company that was founded in 2007 and became (in)famous during the golden era of Facebook gaming between 2008 and 2012 (Mäyrä et al. 2017). Zynga's *Mafia Wars* (2008), *FarmVille* (2009), *FrontierVille* (2010), *CityVille* (2010), and other social games featured tens of millions of players, and the company was considered the market leader in the social games industry (Caioli 2010). In the following section, we examine Zynga's game designs through the Objectivist lens. As the company itself has so far seen very little academic analysis, we utilize media sources for our illustration. Our analysis reveals that Zynga has portrayed many activities Objectivism considers virtuous or nonvirtuous during its heyday as the top developer of social games. Zynga has played different roles, from Second-Hander to Looter, and ultimately a Mover as well.

Zynga has portrayed Second-Hander practices since the very beginning of Facebook games by developing games such as *Mafia Wars* and *FarmVille*, which were considered to be blatant copies of *Mob Wars* (Maestri 2008) and *FarmTown* (Slashkey 2009), respectively (Fig. 1).[10] Zynga ended up settling the issue between *Mafia Wars* and *Mob Wars* in the court, which apparently cost Zynga $7-$9 million USD (Arrington 2009a). Many other games from Zynga were considered copies as well. Some resulted in new legal battles with Electronic Arts, for example, due the similarities in *The Ville* (Zynga 2012) and *The Sims Social* (Electronic Arts 2011) (Grubb 2013). As Zynga repeatedly copied competitors' games and made them popular through viral marketing and cross-promotions, this can be considered a prime example of Second-Handing, where the company does not create anything of its own, just copies the success of others.

Many examples also exist of how Zynga can be seen as a Looter. It has utilized almost every tool from the abovementioned game mechanics, psychology, and marketing to drive revenues up in questionable ways. This was openly admitted by their former CEO Mark Pincus, who

[10] Image retrieved under CreativeCommons from https://kenminjia.wordpress.com/2012/01/27/why-zynga-sucks/.

stated "*I did every horrible thing in the book to, just to get revenues right away*" (Arrington 2009b). For example, the progression in *FarmVille* was hindered, in order to force players to either pay real money or to invite more friends to play. Otherwise, the players could not expand their farms (Paavilainen et al. 2013). Pay-to-pass-boring was a common hindrance in many Zynga's games: actions required certain amount of time to be completed, but the player could pay real money to speed (or skip) the process. This appointment mechanic also punished players if they did not tend their farms in time, as the planted crops would wither away. Withered crops could, however, be rejuvenated later with RMT, if the player paid the price. Nevertheless, as mentioned earlier, the line of fair trade is hard to define here. The rules of the game were not hidden from the players, and all these mechanics were clearly stated. There was, however, one case of clear Looting: *lead generation offer* scams. Let us see the Pincus quote in full (one expletive removed):

> I knew that i wanted to control my destiny, so I knew I needed revenues, right, […], now. Like I needed revenues now. So I funded the company myself but I did every horrible thing in the book to, just to get revenues right away. I mean we gave our users poker chips if they downloaded this zwinky toolbar which was like, I dont know, I downloaded it once and couldn't get rid of it. *laughs* We did anything possible just to just get revenues so that we could grow and be a real business (Mark Pincus, in Arrington 2009b)

Lead generation offers (Carlson 2009) were a mechanism for players to gain premium currency by purchasing third-party software, or by installing tool bars like the one Pincus mentioned above (Mäyrä et al. 2017). These were generally considered scams, as players either paid excessive amount of money in relation to the in-game benefits which they gained, or, for example, they ended up with expensive mobile SMS subscription deals. Even if utilizing game mechanics in various ways to lure players to pay is not considered Looting, lead generation scamming schemes would most definitely fit that category.

The monetization (and Second-Hander copying) characteristics here are clearly similar to the Money-Appropriation (a type of Looting) explained by Rand: "*The Money-Appropriator is essentially non-creative. His basic goal is to acquire an unearned share of the wealth created by others. He seeks to get rich, not by conquering nature, but by manipulating men, not by intellectual effort, but by social maneuvering. He does not produce, he redistributes.*" (Rand 1963, p. 68). In addition to aforementioned Looter methods, Zynga also made an exclusive deal with Facebook (Cifaldi 2012), one that was later overturned (Ha 2012). The details of this deal were not disclosed in public, but it can be speculated that the deal gave Zynga some sort of exclusivity or upper hand against its competitors on Facebook at the time.

Despite Zynga having demonstrated Second-Hander and Looter roles in its practices, it can also be seen as a Mover. Tens of millions of players have enjoyed various games by Zynga, and the company was an icon of social games design. When Zynga copied from others, it often next improved the copied design). It also produced interesting original game content that pushed social games forward, with games like *FrontierVille* (Zynga 2010), *Indiana Jones Adventure World* (Zynga 2011), and *Empires and Allies* (Zynga 2011). Zynga can be also seen as a role model on how to approach the *games-as-services* paradigm (Hamari and Järvinen 2011), with seasonal updates and pacing the play patterns with weekly rhythms (Tyni et al. 2011). Zynga was also a strong proponent of using game analytics for metrics-driven design, a practice that has now become an industry standard. Such design can be perceived as an attempt at better giving the playing audiences what they want—or to exploit them more precisely (Murphy 2014).

The case example with Zynga shows that the F2P game developers can wear many hats at the same time (or at least consecutively), and sometimes it is difficult to draw a clear line between ethical and nonethical designs, except in retrospect. Zynga has obtained parts of its market position through unethical means, but also shown integrity and innovation in the field at other times, and definitely provided also positive experiences for its customers. Excluding the clear cases of exploitation stated by Pincus, many of the other unethical decisions can be explained by the facts that in real life, consistent virtuous behavior is rare. People default to pragmatism, when they are not aware of moral codes or when they do not want to use them, and it is difficult to know all of the facts upon which a rational egoist decision could be made. Some individuals also strive harder for ethical behavior than others do. It is not at all unreasonable to presume that some people inside our case company were also seeking to do the best they could. They may have been Mover personalities themselves, just ones with limited power to affect the works which they were producing.

Zynga, in the most literal sense, moved the social games industry in many ways, and gave a face to both good and bad social games design. In the long run, its prosperity appears to have come from eventually embracing rational profit-seeking instead of greed and exploitation. So while we do not know the ethics of its staff and managers, the company stands as a useful model for why a rational egoist approach to business will produce better results in the long run than any greedy short-term approach can. When people thought Zynga's practices unethical and exploitative, they stopped playing, but once the company remedied its course, it has been able to maintain a steady player presence and thereby also a steady source of revenue.

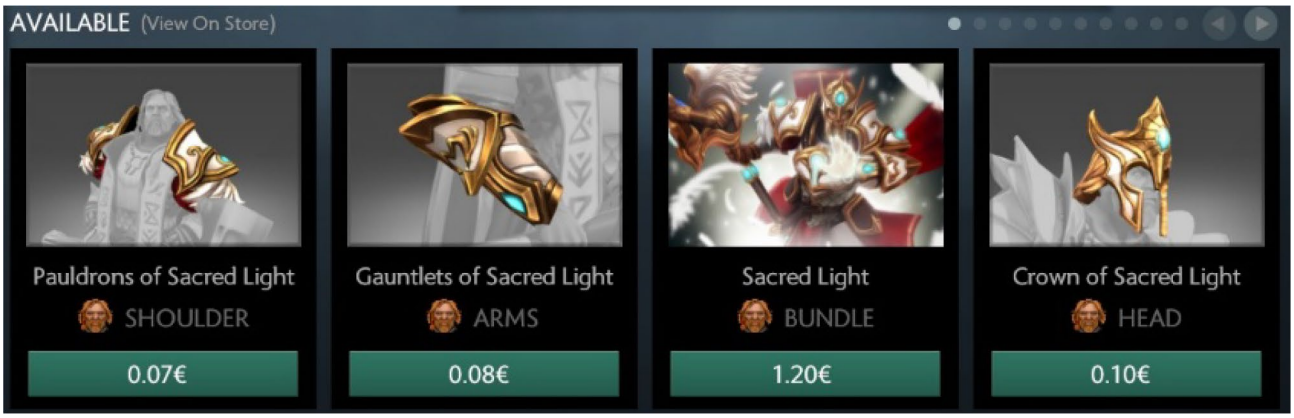

Fig. 2 The multiplayer online battle arena game DOTA2 (Valve 2013), where the players can purchase cosmetic items that do not have a functional purpose in the game, for real money. (Picture by J. Rissanen)

What about the Players?

The most interesting challenge to Objectivist F2P ethics comes not from these monetization options, but from the fact that F2P games can also mislead players as to how their personal data is used. This process has been called "player commodification" in earlier research (Nieborg 2015; based on Mosco 2009). The data of (and on) players, like that of the users of "free" social media such as Facebook, are sometimes the products that are being sold to third parties, ranging from advertisers to political interest groups. The use of the "free" software is thus not actually free to the user, but is monetized by making use of player data (Zhu 2016). Objectivism believes in a free market (e.g., Rand 1964; Brook and Watkins 2012). To lure players with promises of play, and to lure the largest amount of money out of them through covert means instead of subscriptions and other types of fair trade, is a Looter strategy. Rand believed firmly on fair pay for fair work, and that the market would find an equilibrium for fair payment between employers and workers (e.g., 1957; 1964). Player commodification, in the form of "you will get to play this for free (and while we will not say it, we will sell your data to outsiders)," is not fair trade.

This carries over to how we should view player commodification from an Objectivist perspective: player commodification too is essentially the luring players to use an inferior product, and thus not fair trade in which actual value can be perceived by all parties. Were the designers only doing it openly for e.g., price discrimination ("you can also get it for free, but we then have access to your personal data"), this might be ethical. Since, however, access to data by third parties is normally a (well hidden) part of the End-User License Agreement and thus something required from everyone wanting to play, it is not. Even within Sicart's (2009) rather lenient system ethics viewpoint, there are system-external interests involved. As designers furthermore use play-hindrance based incentives to get users to virally advertise the game (a type of Pay-to-pass-boring, in which instead of paying money one needs to invite more people to play the game, or share an advertisement, in order to progress; Paavilainen et al. 2013; Nieborg 2015), we are on dubious ground with even the most selfishness-friendly ethical systems. The players have the option to stop playing, of course, but hiding these options deep in an EULA, while eliciting more players to join by a combination of simplistic, immediate calls to action by the company and simultaneous social pressure by friends, is not ethical. It may not be coercion at gunpoint, but it is unethical nevertheless, using dirty tricks of many kinds at once in a combination that amounts to scamming. Better options are needed, should the designers wish to be virtuous, and to last in the business for the long haul.

A F2P game has to be well enough done to retain players. Most of them will never pay anything. As playing time, and thus player retention, has been observed to be a key factor on spending real money on the game, it is in the interests of the designer to create a well-done game to play (Alha et al. 2014; Fields and Cotton 2012; Hamari et al. 2017a, b; Alha et al. 2018; Lin and Sun 2011; Seufert 2014). At the same time, play has to contain enough incentives for players to want to pay while playing, or to reward the designers and publishers for a job well done (Fig. 2). The former is easier to accomplish, yet the latter is much closer to both Objectivist ideals and the goal of value co-creation between providers and customers. In many cases, a game would optimally combine both, and make players feel like they are rewarding great design by buying something more for their gameplay as well. While Objectivism would accept many forms of incentivization, as long as they are based on Mover logics and not Looting or copying, Rand (1961) makes it very clear throughout her work that the truly virtuous person is the one who does not need to use any sort of manipulation. A well

done game design, marketed skillfully, should be able to accomplish this.

Discussion

The business ethical argument here comes down to the fact that for Objectivism, rational egoism may never be predatory. Acting unethically is acting against one's own interests. Value propositions should be made clear and transparent for all parties, because that facilitates clear trade. If exploitative techniques are deployed, long-term success of the developers becomes unlikely, perhaps impossible. Virtuous action does not guarantee business success, but it is a necessary pre-requisite without which true success is impossible (Smith 1998, p. 72). Objectivism believes that predatory behavior will not serve a person's rational interests in the long run (Peikoff 1991; Smith 2006; Swanton 2014; Woiceshyn 2012).

As formulated by Smith (2014, p. 145; emphases in the original): "*Virtues* are *virtues, in Rand's view,* on the grounds *that their exercise is necessary in order for the results of one's actions to be genuinely valuable*." One has to produce a game that answers players' desires and needs, and market it fairly and honestly, in order to be virtuous. Using tools such as player commodification to make money out of something supposedly free, for example, is not virtuous, nor is the use of psychological traps. We believe that while being unethical may have provided Zynga an early temporary advantage, in the end their ethical, rational egoism, manifested in well-done design and fair trade, was what enabled the once thoroughly hated company to survive and prosper again.

The primary challenge that would remain in cases such as Zynga's, therefore, is Rand's true conundrum: she notes that most people are not rational and virtuous. So why should any Mover expect to be able to conduct fair, trustworthy trade with them? In F2P games, accomplishing this seems to be possible, however. If the design is both virtuous and sufficiently adaptable, the Mover stays in charge, yet the design still provides clear value for the players. It does not matter if the customers' integrity is not as strong. The design is a good, virtuous design.

As this article has argued, virtuous design is not a clear-cut issue, as far as monetization techniques are concerned. On the contrary, it is a question of how certain methods and psychological tools are applied. For example, introducing drastic pay-to-win mechanics into a game that people are already playing is a Looter move that potentially ruins user value for many of the players. In some other games, such as the digital cards based *Hearthstone* and *Magic: The Gathering Arena*, players nevertheless seem to accept pay-to-win mechanics as a normal part of the game. From the Objectivist perspective, the defining line is therefore whether the developers are using coercion, fraud, the obfuscation of facts, or psychological traps to an extent at which players' rational decision-making is severely hindered.

While we have in this study focused on the ethics of game developers, we believe that the key concepts of this article have also wider implications. Game monetization is constantly being debated by developers and players alike (e.g., Alha et al. 2018). What the players first and foremost appear to require in games is transparency, so that they will know that they are making a fair trade when they sign up or spend real money (Švelch 2017). When they have to fear hidden agendas in each EULA change, the sudden alteration of game mechanics heavily towards pay-to-win, or other forms of developer decision, they will become more likely to avoid spending their money, no matter how good a game is at a certain point in time. Rand's virtues offer a clear course with which developers can avoid these problems, as Objectivism guides its adherents to at all times staying rational and fair.

This is also the article's direct contribution to business ethics in general. Customers do not appreciate exploitative monetization, one-sided alterations to agreements, deception or obfuscation, or fraudulent promises of service. The example of Zynga shows that even a large company can suffer from drastic customer attrition, if its business practices are seen as exploitative. We have studied Objectivist virtues here in the context of game monetization also because games, due to their voluntary nature and varying monetization systems, allow for a wide-scale examination of the variances of gaining customer value for money. We believe that the same principles also apply to a great extent to other forms of business, and see this work as a correlation with research that has earlier argued for taking Objectivist virtues to heart in order to profit and to stay profitable (Locke and Woiceshyn 1995; Woiceshyn 2012).

The central limitation of this study is that few if any game designers, developers or publishers have come forth as followers of Objectivism. Our analysis has therefore taken place on a theoretical level. Further studies are needed, in order to see if the theoretical advantages can be verified in action in game companies, the same way that certain authors state that those can be found in e.g., the banking sector (Allison 2013; Brook and Watkins 2012). What also requires further research is the influence of players, an aspect also important from the perspective of value co-creation in play. While the designers and publishers have dominance over their game as a system and thus also its monetization mechanics, the players form a market force of their own. The majority of online games have to rely on a sufficient number of players in order to create interesting, emergent play, so that their players do not get bored. On a practical level, if enough players start voting with their time, attention, and wallets, and choose to play something else instead, they turn into a force able to push the game (possibly also the game

company) out of existence. Zynga's history, as presented in the media, seems to show this phenomenon quite well, and also the ways in which the company appears to have corrected its course.

It is also necessary to study more closely which of the techniques of enticing players to pay are actually reliant on psychological traps that reduce or remove the possibility of rational decision-making. For example, some researchers (e.g., Lin and Sun 2011) have argued that the mechanic of first purchasing in-game premium currency with real-world money (RMT), and then purchasing game content or virtual goods with the premium in-game currency (IAP) clouds the price-value ratio of the eventual purchases for many players, making the trade unfair. Likewise, the use of loot boxes in games, and the addition to micro-transactions to games that were originally sold as purely pay once, raise questions that require much more research. In the former case, the system is extremely vulnerable to developer manipulation. In the latter, while it is a form of offering players more content or options, it can also be a type of exploitation that ruins the value of an already purchased game to many players, in the case of e.g., introducing a severe pay-to-win system. In such cases, many players will stop playing.

Conclusions

This article has discussed how some ways of game monetization are more virtuous than others, by the standards of Ayn Rand's philosophy of Objectivism. It has identified how certain designs—those that provide an enjoyable play experience, for which people willingly pay—as virtuous, and others as derivative and ethically problematic, and examined these through the example of a company, Zynga. Many of the activities Rand's ethics would consider virtuous are those also identified by Heimo et al. (2018) as virtuous design by Aristotelian standards. Motives for virtuous action in business may thus be very different, but the actual results appear to be quite the same, as long as the designers seek a virtuous life. It results in a more enjoyable game experience for the players, i.e., more value for them, and a solid revenue stream for the developers providing an ethically monetized game, because only players who like a game will continue paying for it. We identified monetization models that sell a ready product at a fair price, and games that are open about what they offer for free and what requires RMT, as most likely to be virtuous designs. Likewise, games that prey on human weaknesses, offer inferior quality compared to what is being claimed, or covertly sell player data to other parties, are likely to be unethical. They will therefore eventually be harmful to their creators' long-term interests.

On a theoretical level, this article has contributed to the understanding of how designer, development, and publisher integrity will contribute to a better market situation. When those in charge act with rational self-interest instead of exploitation, people are more likely to appreciate what they sell. A game that the designers themselves also enjoy and appreciate is likelier to make money. Customers pay willingly, and they pay more. In return, they get fair value for what they pay. As game monetization is a form of trade, it should strive for fair trade in all situations. While it is certainly not easy to always accomplish Objectivist virtues and values, there are clear benefits for doing so, even in a not so Objectivist society. In order to expect fairness from others, one needs to start with oneself. And for that, rational egoism offers a clear, uncompromising guideline. It is in the interest of each developer to create good play, to trade fairly, and to treat their players as partners in value co-creation, not as sources of revenue ripe for exploitation through tricks like mental traps. In other words, designers, developers, and publishers will benefit from being the best Movers that they can be. Acquiring and following a strictly rational moral code will help them accomplish this goal.

Acknowledgements The authors wish to thank the anonymous reviewers and the members of the Tampere University GAME research group, for their excellent advice and critique, and Dr. Yaron Brook, for his highly useful reading suggestions during an early stage of this project.

Funding This study was partially funded by Academy of Finland (312395).

Compliance with Ethical Standards

Conflict of interest All authors declare that they have no conflict of interest.

Ethical Approval This article does not contain any studies with human participants or animals performed by any of the authors.

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