"Two Queens and a Pwn, Please."

An ethics for purchase, loot, and advantage design in esports

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Abstract: In this paper, we provide a new perspective on esports as gamified play by mapping out the means of their ludic customization with a reflection on ethics. We start by systematizing purchasable customizations in esport games by their *effects*: cosmetic in-game purchases, functional in-game purchases, and out-game purchases. Subsequently, we situate purchasable customizations within the five *demands* that contemporary esport games set for their players: money, time, skill, luck, and occasion. Ultimately, we show that some effect-demand combinations may result in ethical conflicts when perceived through of the sport-philosophical frame of athletic superiority.

Introduction

Over the past decade or so, the gaming industry has moved increasingly toward monetization strategies that enable players to customize their experiences by offering contents, entities, and items that are not accessible immediately without additional monetary or other related investment. This turn in the design of commercial play—along with the notions of downloadable content ("DLC"), free-to-play ("freemium"), and loot purchases in particular—has recently gained noteworthy academic attention (see Lizardi 2012; Kimppa et al 2015).

A gap in this research, however, persists in how the phenomenon relates to the rapidly growing esport field, i.e. sportified commercial gaming (Karhulahti 2017). Following Petri Saarikoski and his colleagues' (2017) approach to esports as gamified play, this paper aims to fill that gap by systematizing the effects and demands of the abovementioned monetary (and related extra) investments in the sport-ethical light of athletic superiority. The first section introduces three basic types of purchasable customization by their effects and situates them in a more general taxonomy of esport customization demands. The second section probes this effect-demand system from the sport-philosophical standpoint of athletic superiority. We conclude with a discussion.

1. Effects and Demands

We propose optional purchases that customize esport play to be divided in three main categories by their *effects*: cosmetic in-game purchases, functional in-game purchases, and out-game purchases. These three distinctively effective purchase types derive from our theory-driven analytical breakdown of the esport phenomenon, and as such, should not be considered ontologically inclusive but rather a structural premise that we deem useful for this paper's concerns in particular. The three purchase types are examined in the first subsection. The second subsection proceeds by situating those purchases in the higher structural category of *demands*, namely, the requirements that esport games set on their customizing players: time, skill, luck, and occasion.

Two specifying notes on the concept of "esport" must be addressed before moving onward. While our examples are selected from leading videogame esports that are digital by their very nature, the cultural frame through which we look at the phenomenon (sportified commercial play) does not exclude analog esports like *Magic: The Gathering* that operate under similar principles. Additionally, it is worth emphasizing that major differences lie between "esport as professional play in sanctioned tournaments" and "esport as sub-professional play in ranked online leagues"—albeit the line between the two is sometimes thin. Our focus in this (spatially limited) paper rests on the latter, yet we do also point at the former whenever relevant.

1.1. Effects

Cosmetic in-game purchases

Cosmetic in-game purchases are modifications of characters, items, and other virtual entities via extra monetary input. By definition, these modifications are not supposed to impact the player's performance, but rather their aesthetic experience (which, as we shall see later, is not always the case). The most common form of cosmetic in-game purchase is the so-called "skin," which regardless of the word's visual implication may also customize sonic and other properties. With few exceptions, contemporary videogame esports provide their players with the option to make cosmetic in-game purchases.

Functional in-game purchases

Functional in-game purchases are performance-affecting customizations acquirable via extra monetary input. They may affect play in diverse ways; for instance, "boosts" can directly improve the player's capacity to perform and progress, whereas playable entities like "cards," "heroes," and "runes" enable the player to perform with new appliances in alternative ways. Again, it is worth stressing that functional in-game purchases need not always improve the player's competitive performance explicitly.

Out-game purchases

Out-game purchases refer to equipment and service acquisitions that esport players do outside the game. These experiential customizations may include devices like mice and keyboards as well as coaching services and software tools. The primary effect is thus on the organic player *per se*. Unlike above, we do not distinguish between cosmetic and functional out-game purchases, as the binary appears useful only if the customizing transactions are integrated in the game software (to be discussed in more detail later).

1.2. Demands

Dollars, euros, and other hard currencies, as outlined above, set specific monetary demands the meeting of which sometimes enables customizing esport play. Next, we submit four further customization demands: time, skill, luck, and occasion. It should be kept in mind that one and the same customization may be acquirable by fulfilling two or more alternative demands, some customizations entail meeting multiple types of demand, and one demand may also be relevant for acquiring a customization without granting direct access to it (see Karhulahti 2015). Hence, depending on the customization in question, a demand may be *definite* (always required to access the customization), *optional* (one way to access the customization), or *factorial* (does not grant access to the customization directly but is a factor in the process).

Time

Most esport games provide their players with unique in-game currencies as rewards for playing, and these currencies can sometimes be used to acquire the same functional in-game entities that are also sold in the game's hard currency market (cf. Lehdonvirta & Castronova 2014). Many functional in-game entities that are purchasable in esport games with hard currencies can thus be alternatively "grinded out" by playing a lot, i.e. contributing loads of time.

Skill

Some customizations cannot be purchased or grinded out but are only granted as rewards for high performance. For instance, certain skins may be given out as seasonal awards for exceptional ranked performance alone. Acquiring such skin thus demands a predefined skill level from the player.

Luck

A number of customizations such as certain account-typifying "icons" cannot be purchased, grinded out, or earned as awards, but can only be acquired by chance. Today, this is most commonly tied to so-called loot boxes, i.e. surprise in-game prizes the contents of which are more or less random. While playing more grants more loot boxes and increases the chances for unique discoveries, there need be no guarantee for them in case of a definite luck factor.

Occasion

The fifth and last of our customization demands is occasion, i.e. temporally, regionally, or otherwise locally defined conditions of acquirement. In other words, some optional customizations are only available during a specific period of time or for players in a specific region, which can make acquiring these customizations impossible for others by any legal means.

Of note and further emphasis, few of the five demands ever surface alone but rather in groups with other demands. Hence, when they are addressed respectively, they should not be thought of as instances where the demand is solitary, but rather dominant. The five demands are summarized with examples below (Table 1).

Demand / Customization	Money	Time	Skill	Luck	Occasion
Hearthstone playable card: Preparation	Optional demand	Optional demand	Factorial demand	Factorial demand	Factorial demand
Overwatch cosmetic icon: Bunny	Factorial demand	Factorial demand	Factorial demand	Definite demand	Factorial demand
League of Legends skin: Victorious Jarvan	N/A	Factorial demand	Definite demand	N/A	Definite demand

Table	1.
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Many playable cards in *Hearthstone*, such as Preparation, can be acquired by either purchasing packs that grant random cards, earning those packs by playing, or by transforming owned cards into new ones. Either money or time is thus always required, whereas skill (winning more packs), luck (discoveries from packs), and occasion (being at the right time and place to earn extra packs) remain factorial. The cosmetic *Overwatch* Bunny icon, in turn, is a customization that can only be acquired via a loot box, i.e. money and time do not guarantee acquirement (Bunny cannot be gained via transformation or bought directly) yet skill and occasion remain factorial (winning more at right times grants extra loot boxes). Finally, the Victorious Jarvan skin in *League of Legends* was granted only as a ranked reward in Season 1, hence money and luck are not (and never were) factors in its acquirement. The fact that players could acquire the skin only by reaching Gold or higher ranked tier in 2011 makes skill and occasion definite demands, whereas time remains factorial (all positive win rates benefit from temporal contribution).

2. Ethics and Athletic Superiority

In this section, our concern is to estimate the sport-ethical nature of the demands that esport games set on players' customization acts, and in this task, we consider the philosophical topic of fair athletic competition most relevant. For the purpose, we employ Nicholas Dixon's (1999) notion of "athletic superiority," which is based on the assumption that "the athlete who deserves to win is the one who performs better *within the game's rules* and under *conditions of equality*" (13). While both "game rules" and "conditions of equality" are visibly prone to fruitful criticism and discussion (e.g. Hämäläinen 2013), they should also provide us with reasonable (enough) means to scrutinize esports in a valid sport-ethically colored light.

Accordingly, our goal here is to figure out how cosmetic, functional, and out-game effects align with the notion of athletic superiority in esports. Our premise, built on the widely recognized "ethos of sport" (to be revisited later), is that money, luck, and occasion demands should be irrelevant or minimal factors in estimating athletic superiority, whereas time and skill should be relevant and maximal. Acknowledging that an absolute removal of the former and inclusion of the latter is rarely possible, our account aims first and foremost at determining practical parameters for them.

2.1. Cosmetic Effects

Despite the fact that cosmetic in-game purchases are, by definition, designed not to have significant impact on the game performance-wise, sometimes they do. And when they do, their position in the context of fair play becomes relevant.

For instance, some cosmetic skins might be considered harder for players to visually distinguish from the game environment, for which a number of organizations and tournaments (e.g. in *Heroes of the Storm*) do not allow certain skins to be used in sanctioned competitive play.¹ From the perspective of athletic superiority and its concrete application, the ethical substance in this matter does not, however, pose the question "what skins should be banned?" but rather "should such skins be banned in the first place?" If all players have an *equal* opportunity to purchase skins that have been developed in concert with the game's *rules*, why should some of them be banned in the first place? Our previously established premises yield two counterarguments.

Initially, it could be pointed out that skins are mainly acquirable via hard currencies, which is generally considered a factor external to athletic superiority. Keeping in mind that officially sanctioned esport tournaments tend to allow the participants to use all available skins free of charge, this viewpoint does not concern tournament play with such exceptional conditions. Furthermore, if the tournament does not grant free access to all available skins, it is still worth noting that a skin rarely costs more than 10–20 dollars or euros, hence even if multiple skins are beneficial, the monetary sum required to purchase them would hardly be an exception in the history of sports where equipment acquirement has always played more or less critical roles. As long as the skins remain within a reasonable price range and the benefits they yield stay marginal, there is no major reason to ban them on monetary grounds.

The second counterargument concerns the fact that skins appear differently for different players. For instance, certain skins are frequently reported having negative effects on colorblind players' performance due to their unique combinations of visual effects. This can be considered conflicting with player equality. Nonetheless, the problem here seems to be that of design rather than ethics and fair play. All major esport developers are known to run colorblind (and other related) tests on the skins they release. That is to say, if a cosmetic skin sets a group of players (e.g. those with deuteranopia) into a disadvantaged position, such instance is primarily a mistake in game design: none of the leading esports developers that we are aware of consciously maintain cosmetic designs that run against this principle. Whenever such design flows occur, banning the skin temporarily is a rational procedure until a fix is released.

Ultimately, the potential benefits of cosmetic effects are presently so small that there seem to be few reasons for considering them unethical or unfair in terms of athletic superiority even when their acquisition is limited to monetary input. The foremost problem points tangle around cosmetics that can only be acquired by luck and occasion (e.g. Victorious Jarvan in Table 1), but as long as their impact on the game is solely aesthetic, there is no reason to discuss such instances more broadly. Designers should pursue minimizing the impact that cosmetics have on player performance unless they wish to include money, luck, or occasion in their ideal of athletic superiority.

¹ For an example, see https://heroeshype.com/naopen/

2.2. Functional Effects

Many of us would see little sense in a player purchasing the queen piece in a chess tournament, and yet, the spider queen Elise (a playable virtual champion in *League of Legends*) has been available for purchase in the game's store since 2012, currently priced around 5–10 euros or dollars. In some esports, players are thus given the chance to make functional in-game purchases, i.e. performance-affecting enhancements acquirable via additional hard currency input. Since the complexities of diverse esports way exceed our present word limit, we do not try to cover all nuances of functional customization but rather focus on the paradigm that exemplifies the core of the issue: speeded up resource acquirement.

Generally, none of today's major esports offer direct purchasable empowerment that would provide definite competitive advantage. What many contemporary esports do offer, however, is the chance to *speed up the process of acquiring resources that all high-level players are expected to have.* Practically put, entities that are truly functional in a competitive virtual environment ("cards," "heroes," "runes" etc.) are usually acquired over time as free rewards for playing the esport game, and in this rubric, spending hard currency to purchase something like Elise merely enables the player to reach the saturation point of available resources faster. As to fair play and athletic superiority, the question is thus mainly that of time: how many hours it is reasonable to expect for a new player to play before their free rewards saturate the functional resource cap?

Needless to say, there can be no absolute amount of time that could be used as a universal reference. One way to draw a pragmatic ballpark could be to employ the figures of expertise research in the field of psychology, nevertheless. If we accept the classic notion of "expert performance" that is argued to entail around 10 000 hours of deliberate practice next to international "good performance" that tends to come with some 5 000 deliberate practice hours (Ericsson et al. 1993), it would be defendable to assert that esport players should be given access to all functional resources by 5 000 played hours at the latest. If we are to believe in the calculations of esport forums—e.g. acquiring the largest pool of playable esport characters, that in *League of Legends*, has been estimated to take 2000–3000 play hours—there seems to be no conflict between the possibility to purchase functional resources and accumulating the resource pool via practice. By the time when the player is experienced enough to reach higher performance levels, they should also have acquired all the functional resources for free.

The above should be submitted with two cautionary remarks: players who compete on low performance levels may still find themselves in unequal positions due to some accessing all functional resources faster than others by means of hard currency purchases, and even on higher performance levels hard currency purchases might provide occasional advantage by granting some players access (and practice opportunities with) new resources without delay. Without, again, going into the specifics of different esport games, we do not consider the former markedly problematic due the minor benefits in question (a purchased playable character becomes useful only if the player learns to use it via deliberate practice), and the latter mainly concerns esport games like *Hearthstone* where a new set of expensive cards is a frequently occurring event (see Table 1). We do, however, wish to add a call for empirical research especially concerning the latter point: it would be important to substantiate our view by qualitative interviews with expert players to investigate, for example, if *Hearthstone* professionals consider regular card purchases critical for competitive success (e.g. due to benefits related to gaining more time for experimentation).

2.3. Out-game Effects

In brief, we do not consider the out-game effects generated by monetary or other sport-ethically pertinent demand factors (i.e. esport players' service and equipment acquisitions) of great relevance here. Good coaching is often expensive coaching, and this applies to all sports somewhat equally. There is no need to deprive coaches of their competitive salaries. Likewise, while it is a fact that apparatuses such as high-quality computers and mice may result in concrete performance-enhancing benefits for those who are able (and willing) to invest in them, those benefits are not significantly different from the ones in other established sports. Quality gaming hardware is not free, not unlike quality bicycles, skis, and sailing boats. If a specific piece of hardware turns out exceptionally superior in terms of player performance, tournament organizers should consider banning or restricting their use in case of limited availability.

3. Conclusions

Regardless of their economically driven gamified design, contemporary esport games seem to be somewhat advanced from the sport-ethical perspective of athletic superiority and fair play: available customizations that are problematic in terms of rules or player equality (such those demanding exceptional quantities of money, luck, and occasion) appear to be scarce. Nevertheless, we would like to conclude by calling attention to the fact that athletic superiority and fair play, as sport-ethical concepts, both derive from the so-called "ethos of sport" that has come to grant certain elements with normative value without being able to explain *why* (see Nguyen 2017). In other words, by no means do we suggest that sports and esports where factors like money, luck, and occasion are central should be considered corrupt or poorly designed—such activities can well function as ethically rigid competitive activities operating under their own (distinct) standards of fairness. While our present goal has been to investigate esports specifically through the lens of athletic superiority and fair play, as conceived by the ethos of sport, we encourage future research to explore alternative ethoses that are less (or differently) restricted in their contextualized framing.

Acknowledgements

We thank C. Thi Nguyen for his insights on the philosophical argument, Ying-Ying Law for her expert perspective on *Hearthstone*, Lassi Kimppa for verifying other gaming related parts, and our three reviewers (especially the second one) for their comments and feedback.

References

Dixon, N. (1999) "On Winning and Athletic Superiority." Journal of the Philosophy of Sport, 26.

Hämäläinen, M. (2013) "Three Standards of Athletic Superiority." *The Journal of Philosophy of Sport*. Online Issue '13.

Karhulahti, V. (2015) Adventures of Ludom: A Videogame Geneontology. University of Turku.

Karhulahti, V. (2017) "Reconsidering Esports: Economics and Executive Ownership." *Physical Culture and Sport Studies and Research*, 74 (1).

Kimppa, K., Heimo, O. & Harviainen, JT. (2016) "First Dose Is Always Freemium." ACM SIGCAS Computers and Society, 45 (3).

Lehdonvirta, V. & Castronova, E. (2014) Virtual economies: Design and Analysis. MIT Press.

Lizardi, R. (2012) "DLC: Perpetual Commodification of the Videogame." *Democratic Communiqué*, 25 (1).

Nguyen, C. (2017) "Philosophy of Games." Philosophy Compass, 12 (8).

Saarikoski, P., Suominen, J. & Reunanen, M. (2017) "The Gamification of Digital Gaming – Video Game Competitions and High Score Tables as a Prehistory of E-Sports in Finland in the 1980s and Early 1990s." *Proceedings of GamiFIN'17*.