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**DO ‘LOOT BOXES’ IN VIDEO GAMES CONSTITUTE
DEVICES FOR GAMBLING OR LOTTERIES – COMPARATIVE
STUDY BETWEEN FINLAND AND THE UNITED KINGDOM**

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ABSTRACT

Loot boxes are virtual consumables in video games, which when consumed yield randomized rewards to the consumer, some of which are highly valuable. The author argues that these mechanics constitute devices for gambling in the UK and non-money lotteries in Finland. These presumed lotteries which take place inside video games are problematic for several reasons. They offer presumably an unsupervised way for minors to gamble or to participate in lotteries, they may not be compliant with the gambling and but not excluding or lottery acts of the jurisdictions they are consumed in, and they may offer in some cases a chance for money laundering. Loot boxes are a very minor defect as such but may be problematic when they collide with gambling or lottery legislation that was drafted before anyone even knew such concept could exist. This is demonstrated by the lottery problem in which the legislator could not have had intent to prohibit loot boxes in particular, but services that may result the same outcome as more traditional lotteries, and loot boxes happen to fit that group of concepts.

If loot boxes are found by the authorities to constitute devices for lotteries this will have effects across the board on game companies, service providers, supervision of the products and in the games themselves. The phenomenon will create also as a byproduct a specialized digital legal market, which provides either the answers how to change the services to make them compliant, or even furthermore offer a service for the game companies in which technologically savvy lawyers make the changes and sell that as a service.

Keywords: loot boxes, lotteries, gambling, Finland, United Kingdom, video games

INTRODUCTION

Loot boxes are virtual consumables in video games which are consumed to receive virtual items with different effects.¹ These items may be completely new items to be used in the game, enhancements to the player's abilities or changes to the appearance of an item or character by altering the color, pattern or model of an item inside the game or network of games or gaming platform(s). At the time of consuming the loot box the player does not know what prizes he or she will get, since the dispensed virtual items are chosen randomly. However, the player always gets something. This means that every loot box purchase yield something in return. Even the value of the items may vary, there is always a performance for a compensation in the legal sense. The loot boxes may be acquired by purchasing them with real money, by playing the game, or by purchasing them with in-game currency², which may or may not be acquired with real money. The hypothesis of this work is that loot boxes do fulfill the criteria for lotteries and, but not excluding or in case of a terminological contradiction, gambling in Finland and United Kingdom respectively. The author wanted to conduct a comparative study between Finland and United Kingdom. The research question of this work is "Do 'loot boxes' in video games constitute devices for gambling or lotteries?".

Were loot boxes decided to fulfill the criteria of lotteries, or to constituting devices for gambling, the changes this brings effect parties across the board. First, from the commercial perspective it will affect the game companies and their products, service providers who provide platforms for buying games and playing them and the mechanisms and revenue of those platforms, for example Valve's Steam, EA's Origin, Ubisoft's Uplay, Blizzard's Battle Net, and GOG Galaxy of CD Project, among others. These operators in the market would have to implement measures to verify the age of a person if the loot boxes were considered gambling, and this could prove very difficult.³ From the public point of view this will affect the police and the official regulating lotteries -

¹Abarbanel, B. (2018). GAMBLING VS. GAMING: A COMMENTARY ON THE ROLE OF REGULATORY, INDUSTRY, AND COMMUNITY STAKEHOLDERS IN THE LOOT BOX DEBATE, *Gaming Law Review*, Vol. 22, Issue 4

²For example, Riot Points in League of Legends, Crystals in Star Wars battlefront 2 and Arcane Dust in Hearthstone.

³ Kelly, J. M. (2000) "Internet Gambling Law", *William Mitchell Law Review*: Vol. 26, Issue 1, p. 59

Arpajaishallinto in Finland, Gambling Commission in the United Kingdom- by requiring them to conduct supervision and possibly sanctions if the law is considered to been violated.

The question whether the loot boxes should be considered gambling and, but not excluding or, lotteries is unarguably important from the perspective of legality of the practices in their current form, but also from the perspective of the business opportunity it brings to lawyers. This is independent from the verdict on the matter, since if the loot boxes are considered to be devices for gambling or lotteries, then lawyers are needed to bring the ventures of game companies into conformity with the gambling or lotteries legislation either by guiding the companies to change their mechanisms relating to randomized micro transactions, or by helping them to get the licenses needed to legally hosting lotteries. In the latter example it must be noted that the practices must be accommodated to the restrictions of minors to gamble imposed by law. If, however, the loot boxes are not found to be gambling or lotteries, lawyers are needed to guide the game companies' planning in future to avoid from accidentally creating a form of randomized micro transactions which could and would constitute devices for gambling or lotteries under the jurisdictions in which the companies operate. In addition, it must be considered that national legislation even inside the European Union may take different stands on the topic, so the work to be done in each country would vary. The idea of gambling and its forms are constantly broadening, and the law should be able to cover more manifestations of a certain idea in the future – good example of this is case in point gambling.⁴ It would most likely be very profitable if the game companies could be presented a single solution which would comply with all the national laws of the member states of the European Union, and still be able to retain the current micro transaction business model. This could very well be done in the way Richard Susskind proposes in his book *Tomorrow's Lawyers* by mass-producing semi-tailored services in packaged form.⁵

The primary reason why the author wanted to study the concept that could loot boxes be defined as lotteries is that they bear many similarities to the characteristics of conventional lottery but have not been affected by gambling or lotteries legislation in the past.⁶ If the prizes won from loot boxes have monetary value, why are there no tax consequences if someone wins a cosmetic upgrade that has value of hundreds of Euros, and the item can later be sold, and the money collected? What is

⁴ Miller, K. C. (2014) How Should the Past Inform the Future? Reviewing Regulating Internet Gaming: Challenges and Opportunities, *UNLV Gaming Law Journal*, Vol. 5, Issue 1, p. 49-80

⁵ Susskind, R. (2013) *Tomorrow's Lawyers.: Introduction to your future.*

⁶ Rose, I. Nelson & Loeb, Robert A. (1998). *Blackjack and the Law*. 1st ed. Oakland, CA: RGE Publishing.

furthermore worthy of mentioning is the importance of studying this subject from the point of view of public health, since gambling addiction is a mental and behavioral disorder.⁷⁸ If commercial entertainment service providers are able to sell services which use the same mechanisms as traditional lotteries and gambling, and those new services produce the same result as traditional lotteries and gambling⁹ but are however still not considered to be such legally, there truly exists a loop hole between the spirit of the law and implementation and execution of the law. The law should not omit to touch something only because it has been done in a new way, and that is why it is important to study this subject. Also, underage persons have a very easy access to loot box consuming, and were loot boxes found gambling or lotteries, then these service providers have been offering lottery or gambling services to minors.

As Andrew Murray writes in his book *Information Technology Law: The law and Society*, there are three effects when moving from industrial society to informational society¹⁰. These three effects are moving from ownership and control of things to those of information, new and revolutionary model of markets and delivery services and lastly moving from rivalrousness to non rivalrousness. From these theses it is apparent that the widespread use of internet both as a platform for information but also for services will greatly change the way people consume products and services and furthermore possibly expand the definitions of products and services. The same phenomenon is happening in the fields of internet crime and data protection so rapidly that when books are written they are already outdated when they come out.¹¹ Copyright faces new challenges as well as technology develops and makes possible new ways to copy and share content.¹²

The author conducted a comparative study between Finland and United Kingdom. The research question of this work is still “Do ‘loot boxes’ in video games constitute devices for gambling or lotteries?”, and the aim of this thesis is not to propose changes, but rather to explore the question.

⁷ Blanco, C. K. & Nautiyal K. & Hen, R. & Okuda, M. (2018). Gambling disorder: an interactive review of animal and human studies: an interactive review of gambling disorder - *Annals of the New York Academy of Sciences*, Vol. 1394, 1st issue, p. 106

⁸ Griffiths, M. (2018). Hot topics: Gambling blocking apps, loot boxes, and ‘crypto-trading addiction’ - *Online Gambling Lawyer*, Vol. 17, No. 7, p. 9

⁹ Griffiths, M. & King, D. & Delfabbro, P. (2009). Adolescent gambling-like experiences: Are they a cause for concern? - *Education and Health*, Vol. 27, No. 2, p. 27-30

¹⁰ Murray, A. (2013). *Information Technology Law: The Law and Society*. 2nd Edition. Oxford: Oxford University Press.

¹¹ Lloyd, I. J. (2017). *Information Technology Law*. 8th Edition. Oxford: Oxford University Press.

¹² Fisher, III W. W. (2004). *Promises to Keep: Technology, Law, and the Future of Entertainment*. Stanford: Stanford University Press.

The prevailing question in comparative law is the question of why the sources are compared.¹³ After all, the core of comparative law is not to reach some ends other than knowledge itself, as Sacco presented in his theses.¹⁴ The reason why the author chose Finland is that it is both author's home country and a country representing Nordic legal family¹⁵, which the author finds particularly interesting in the larger context of Civil law. The reason why the author chose United Kingdom as the other country is that it is a Common law country in European Union and our Western legal tradition has common roots with it too, and the author is interested whether there are any major differences on the approaches of these two systems to the same topic.¹⁶

¹³ McDougal, M. S. (1952) *The Comparative Study of Law for Policy Purposes: Value Clarification as an Instrument of Democratic World Order – Yale Law School Faculty Scholarship*, Faculty Scholarship Series, Paper 2475, p. 28-29

¹⁴ *The Oxford Handbook of Comparative Law*. (2019). /Eds. M. Reimann, R. Zimmermann. Oxford: Oxford University Press.

¹⁵ Husa, J. (2015). *A New Introduction to Comparative Law*. Oxford: Hart Publishing.

¹⁶ *Comparative Law: A Handbook*. (2007). /Eds. E. Özücü, D. Nelken. Portland: Hart Publishing.

1. WHAT ARE 'LOOT BOXES' IN VIDEO GAMES

Loot boxes are a general term which refer to a group of virtual consumables, and they do not have to resemble a box necessarily. They can also be packs of cards like in Hearthstone or FIFA games, surprise gifts or randomized rewards. The artistic appearance is not relevant, but rather the mechanics of the virtual consumable, and the effects it produces when consumed. The produced meaningful effect is the randomizing of a reward and yielding it to the consumer of the loot box in form of a virtual item.

The loot boxes yield usually alternative cosmetic appearances for already existing content, new content, expressions of communication or resources. The alternative cosmetics do most commonly change the appearance of a character or an item by altering its color, size, shape, pattern, animation or sound effect. The other category of virtual items yielded by loot boxes is formed by items which unlock new features, or enhance the ones existing already. These can be new characters, maps, abilities for the characters, or just intensifying upgrades to the variety of these that the player has already at their disposal. Even there is a huge variety of different kinds of rewards, there is however only one attribute that matters from the legal perspective, the monetary value. The importance of the loot boxes as a commercial element is not minor, since they form a considerable part of the game companies' revenue stream. It is important to understand that even the game companies might claim differently, the nature of the loot box micro transaction is that the consumer buys something with real money (or with currency convertible to real money) which contents they do not fully know, and there is such an element of chance which cannot be predicted, contributing to the outcome of the loot box purchase. Until recently illegal gambling has been mostly run by criminal organizations, and there has a rising trend of illegal internet gambling since 1990.¹⁷¹⁸ However, loot boxes may present a new way of unintentional illegal gambling. This element of chance has been juxtaposed to illegal gambling also before.¹⁹ This is by its nature a business-to-consumer activity based on transactions.²⁰ Of course, it must be noted that the loot box yields

¹⁷ *Encyclopedia of Transnational Crime and Justice*. (2012). /Ed. Beare, M. E. Thousand Oaks, CA: SAGE Publications.

¹⁸ *Problem Gambling in Europe: Challenges, Prevention, and Interventions*. (2009). /Eds. G. Meyer, T. Hayer, M. Griffith. New York: Springer.

¹⁹ Scott, M. D., Talbott, J. N., Jacobs, B. D., Owens, R., Hurst, D. (2019). *Scott on multimedia law*, 4th Edition, New York: Wolters Kluwer.

²⁰ Hoffman, D. L., & Novak, T. P. (2005). A conceptual framework for considering web-based business models and potential revenue streams. - *International Journal of Marketing Education*, 1(1), 7–34.

items which always have monetary value, since if real money has been used to receive a certain item, it can be determined to have a value, even if the value concretizes only at the moment of purchase itself and is not fixed to that further on.²¹

The nature of the loot boxes described before is not problematic at all as it is, if there is no chance for the consumer to gain monetary benefit or suffer a monetary loss from the purchase of the loot box. This is because the monetary value of the outcome is generally seen as a crucial defining element in gambling²² and lotteries²³. (There is an unofficial English translation of *Arpajaislaki 1047/2001* made by the Ministry of the Interior, Finland).²⁴ It could be argued that if no monetary gain is possible by selling the items to other players, then all the items receivable from loot boxes are in theory of the same value, the same amount as the price of the loot box. However, this is only possible if the same item cannot be received twice, and the only randomized value is the order in which the items are presented to the consumer of the loot box. This is not the case, since duplicate items can be received. Usually the duplicates are converted to an in-game currency, and they do not yield the same amount of currency it takes to buy them with the same currency²⁵. This means that the amount of loot boxes a player must consume may vary, so there is a chance to receive full performance for the purchase, a new item, or a duplicate, which is not as valuable. This means

²¹ Aichner, T. & Jacob, F. (2015). Measuring the degree of corporate social media use. - *International Journal of Market Research*, Vol. 57, Issue 2, p 257-275.

²² Gambling Act 2005, Part 1, Section 3

²³ *Arpajaislaki 1047/2001* §2

²⁴ *Lotteries Act 1047/2001* (2001). Ministry of the Interior, Finland. Accessible:

https://www.finlex.fi/en/laki/kaannokset/2001/en20011047_20011344.pdf , 4 May 2019.

²⁵ The exchange by which the duplicates' value is claimed by the consumer who received the duplicate, is to convert the received virtual item back to a currency, be it fiat currencies, crypto currencies or the currency inside the game to further receive a new item. The exchanging happens either by selling the item back to the service provider for in-game currency, or by selling it to another consumer for either in-game currency, fiat or crypto currency, or simply by changing it to another item. There are two categories of exchanges, the ones happening inside the game or on the game service provider's platform, and the ones happening outside the game companies' and service providers' platforms, usually on third-party hosted platforms dedicated to this commerce, or on web stores like eBay. The former category can easily be monitored and regulated, but the latter form a problem. Even if the game company prohibits the commercial use of the items in the terms of service, that may not be deemed effective enough a measure by the authorities to prevent the trades from happening. This is because if the game companies do not make it impossible for the trade to happen, they may be indirectly deemed to enable it, because the trading of the items is beneficial for the game company since it establishes value and respect for the items, and players then pursue these items more. The trading of the items on the service providers' platforms happens most commonly by listings to buy and sell, or the combination of the two, like Valve's listing tool on the Steam platform. These kinds of transactions are easy to monitor, regulate and even prevent if deemed necessary by the service provider or by a regulating authority. When the items are exchanged on third-party platforms, the trades are usually carried out by trade bots. On third-party platforms dedicated to the trades, the platform provider usually takes a small commission of the remuneration payed for the virtual item. This virtual item commerce further supports the idea that the virtual items have values, and that there indeed is a chance to gain profit or suffer a loss monetarily.

there is indeed a chance of monetary loss.²⁶ This further establishes that chance has an innate effect on the purchase²⁷, the consuming the purchased loot box, and the reward the consumed loot box yields.

Earlier I mentioned the ability to gain monetary profit by selling the rare item to another player. Why the ability to exchange the virtual items to a currency is problematic is that this option takes further the final element that is in the description of lotteries²⁸, the monetary value, the two others being a purchase of the lot and the random nature of the outcome. The previously mentioned chance to receive less than a full performance combined with the possibility to gain monetary profit establish (even by themselves) the descriptive element of monetary value²⁹, but further so when they appear together.

Loot boxes are different in nature from the items that they yield when consumed. Both are virtual objects with no real-world applications which only exist inside a platform created by a game company which can be shut down at any moment. However, loot boxes are different from their contents by use, applications, value and properties. Loot boxes cannot be used for any other purpose than opening them. They cannot be in most cases traded. What really separates them from their contents is that they usually have a set value, which is not affected by the values of the items received from them in most cases. The contained items' value is usually determined by the demand and supply. I would argue that loot boxes are different from scratch card lottery tickets. A scratch card either is a winning lot or it is not, and they hold that status from the moment of their creation to the moment of their destruction. Loot boxes however do not hold a status in similar way, but they are in a way tokens used to gain one or more randomized rewards. Because the items yielded by the loot box are randomized, the "contents" of the loot box receive a status only when the box is consumed, and before that there is just the box, nothing else. For these reasons, the author argues that loot boxes are separate items from the items that are received when the loot box is consumed.

The concept of loot boxes being possibly gambling, or lotteries, consists of three main elements of lotteries (also shared by the definition of gambling), which are possibly present in loot boxes.

²⁶ Wang, J. (2017). Video Game Loot Boxes – *The Columbia Science and Technology Law Review*, Vol. XIX (2017-2018), posted November 8, 2017.

²⁷ For example, in Playerunknown's Battlegrounds, where the consumer does not know even what kind of loot box they will get.

²⁸ *Arpajaislaki 1047/2001* §2

²⁹ Aichner, T. & Jacob, F. (2015) *supra nota* 21, p 257-275.

These elements may also be criteria for lotteries in Finland, and that is why that term must be considered as well, and not only the term ‘gambling’ can be examined. This kind of research would not be possible if only the word ‘gambling’ is used and examined, since depending on the context (of jurisdiction) the term has completely different meaning. Therefore, when used internationally, the word ‘gambling’ is ambiguous and the context it is used in should always be analyzed.³⁰ Finnish and British legislation do use different terms for the same activity in this case. First of these criteria is the premise that the consumer must give something to be granted access to the situation, be it lottery, a blackjack table or a horse race. A buy-in, in common speech. When in the activity situation itself, there is luck involved in way that even the most skillful and knowledgeable participant cannot eliminate the effects of chance from the calculation for the probability of winning. This is the element of random outcomes. The last element is a reward which has monetary value. The reward does not have to be money necessarily, it can be tokens that can later be exchanged for money, goods or even a service, if it has monetary value. Loot boxes must be bought, or they can be earned in some cases by playing. If the loot boxes are bought with real money, or there is an option to buy them with real money, then they have monetary value, and earning them can be considered as payment for them. Something with monetary value must be given up, to be able to open a loot box. Also, the outcome of the consuming the loot box is always random. Even though there are percentual chances of getting each item, the selection of the individual outcome is chosen by the game based on chance. This fulfills the element of randomized rewards.

Finally, the “loot” yielded by loot boxes can be tradable. There are trading communities for the content of big games which allow the player to transfer the virtual items to another player, for example Valve’s Steam Marketplace. Players most commonly use real money for these transactions, which means that these items have a monetary value. Therefore, it is obvious that for example the cosmetic modifications for weapons in the game Counter Strike: Global Offensive do have real monetary value, and this is part of the micro transaction business model. Also, in the case of the before mentioned, the items are bought and sold in Steam Marketplace for real money. This constitutes for the final element, the rewards with monetary value. The presumption of the items received from loot boxes having monetary value is further supported by the phenomenon known as skins betting, which is placing bets of tradable Counter Strike: Global Offensive weapon cosmetics for professional matches of Counter Strike: Global Offensive. The value of the

³⁰ Dale, K. (2018). Legal Corpus Linguistics: Gambling to Gaming Language Powers and Probabilities - *UNLV Gaming Law Journal*, Vol. 8, Issue 2, p. 233-252

cosmetics is measured in real money, and if the person placing the bet bets right, they receive back the cosmetics they placed on bet and some more. The value of the gained cosmetic is determined from the odds, in the same way as bet-return relation is calculated in traditional sports betting.

2. THE FINNISH PERSPECTIVE

In Finland, the Veikkaus Oy has monopoly on lotteries which may yield monetary rewards, or so-called money lotteries.³¹ Veikkaus Oy is in its entirety owned by the Finnish government, so lotteries with monetary rewards are a state monopoly.³² Non-money lotteries yield prizes other than money, and permissions for such lotteries may be granted to non-profit organizations, private foundations and registered associations which have at that time their registered domicile in Finland³³. Such permissions may be bestowed upon such parties as sports clubs, organizations benefitting the common good and charity foundations, but not upon commercial bodies such as game companies. Loot boxes do not yield money, so it is apparent that they could only fall under non-money lotteries. This requires that loot boxes match the criteria for non-money lotteries under Finnish Lotteries Act 23.11.2001/1047. By the Finnish definition of gambling, which is constituted by a certain group of specific lotteries listed in *Arpajaislaki 1047/2001*, loot boxes cannot constitute devices for gambling, but for the sake of the research question that possibility must be empirically eliminated.

The Finnish official responsible of supervision and license granting is *Arpajaishallinto*, The (Finnish) Gambling Administration. The Gambling Administration is a department of the National Police Board. The Gambling Administration is also the authority to give statements considering lotteries, their applications and more specifically gambling in cases where an official's statement is required.

2.1. Applied legislation, regulation and statements of the competent officials

There are three sources from Finnish jurisprudence that will be focused on;

1. The Finnish act regulating lotteries in general is the *Arpajaislaki 1047/2001* (Lotteries Act 23.11.2001/1047)

³¹ *Arpajaislaki 1047/2001* §11

³² *Arpajaislaki 1047/2001* §12

³³ *Differences between lotteries and gambling*. Arpajaishallinto. Accessible: https://www.arpajaishallinto.fi/gambling/lotteries_gambling_difference , 5 May 2019.

2. Illegal gambling is described in the Finnish Criminal Code 19.12.1889/39, (herein on Finnish Criminal Code) Chapter 17 Section 16 - Organised gambling (563/1998).
3. (POL-2018-22730) – *Decision of The Gambling Administration*

2.1.1. Definitions of gambling and lotteries

The Finnish Lotteries Act states that: “lotteries are activities in which participants may win, in full or in part, a prize of monetary value based on chance and in which there is a charge for participation”³⁴. There are two forms of lotteries, money lotteries and non-money lotteries. Money lotteries’ prizes are money, or coupons or vouchers convertible to money. Money lotteries are a form of gambling. In non-money lotteries “articles or vouchers or coupons exchangeable for articles or services can be won in a draw or in a comparable manner based on chance”³⁵ as stated in the Section 3; 8) of the *Arpajaislaki*. According to National Police Board and Finnish Gambling Administration, lotteries have three distinct elements, which all must be fulfilled at the same time. These are payment, chance and prize of monetary value.³⁶

In the Finnish legal terminology, gambling is a certain form of lotteries, in which the participant may win money³⁷ specifically. Gambling is, according to *Arpajaislaki* §3 1)-7) certain predetermined forms of lotteries which yield monetary prizes. Gambling includes in Finnish legal terminology, as stated in the *Arpajaislaki* §3;1-7 and listed below in the next paragraph. The before mentioned terms outline the definition of gambling in Finnish legislation. It is of utmost importance to note, that gambling is a subcategory of lotteries by Finnish legal terminology.

“ 1) *money lottery* means a lottery in which money can be won in a draw;

2) *betting* means a lottery in which players have the opportunity to receive a share of the winnings accumulated from participation charges according to the product of the stake placed by the player and the odds indicating the probability of outcome on the basis of a guess about the results of a sporting or other competition, but excluding trotting races;

³⁴ *Arpajaislaki* 1047/2001 §2

³⁵ *Arpajaislaki* 1047/2001 §3; 8)

³⁶ *Arpajaislaki* 1047/2001 §2

³⁷ *Arpajaishallinto, supra nota* 33

3) *pools* means a lottery in which players have the opportunity to receive a share of the winnings accumulated from participation charges on the basis of a guess about the result of a sporting competition or trotting race or a draw of numbers or symbols;

4) *slot machine* means a game machine or game equipment with which players can win money;

5) *casino game* means roulette, card and dice or other comparable games in which players can win money;

6) *casino activities* means the keeping of slot machines and casino games for the use of players in supervised premises approved for gambling purposes;

7) *totalisator betting* means a lottery in which players have the opportunity to receive a share of the winnings accumulated from participation charges according to the product of the stake placed by the player and the odds indicating the probability of outcome on the basis of a guess about the result of a horse race;”.

2.1.2. How do loot boxes fit those definitions

To fulfill the definition of lotteries under Finnish law, the activity must have three defining elements, which are a purchase to participate, effect of chance, and a prize of monetary value. The prize can be either money or non-monetary prize. The first option constitutes money lotteries, the latter non-money lotteries. Loot boxes cost either real money, in-game money which can be bought with real money or earned inside the game, or the loot boxes themselves can be earned by playing. Real money constitutes the purchase to participate, so does the in-game money if it has been purchased with real money. The author would argue that earning in-game money which is later used for the purchase and the direct earning of the loot boxes does constitute a purchase by itself. This is since the player must depart with the in-game currency or the earned loot box to receive the randomized rewards, they have to offer something, to make an exchange.

The function of the loot box is the same in all the possible scenarios regardless of the way the loot box has been acquired by the consumer. This means that the general and special functions of the loot boxes apply in their entirety to the group of loot boxes which supposedly may be described as non-monetary lotteries in Finland. Therefore, it is established that since all loot boxes have the element of chance related to the outcome received upon the consumption of the loot box, these

supposed non-money lottery loot boxes have them as well. The element of chance is brought by the mechanic in the loot boxes, which works in the way of randomizing the rewarded item the consumer will receive. Instead of already possessing the qualities, the loot box creates them at the time of consumption. There therefore exists an element of chance which cannot be eliminated, so the second element of the criteria is also fulfilled by the supposed non-money lottery loot boxes.

As stated before, if real money is used to purchase an item, it can be directly established that the item in question has monetary value.³⁸ If not, the monetary value can be indirectly established by the economy of the community or by deducting the value of the loot box, item or items received from the loot box from their value in in-game currency and therefore money, or by deducting the monetary value from the monetary price of a single loot box if it was purchased with money instead of earning it by playing. This furthermore establishes that the supposed non-money lottery loot boxes, when purchased with real money directly or indirectly via in-game currency as a proxy currency, or even acquired through playing do fulfill all the three elements of the criteria of lotteries listed in the §2 of Finnish Lotteries Act, the *Arpajaislaki*.

The element of purchase, the first element of criteria for lotteries defines that the right to participate must be purchased. In a purchase, both sides give something to receive something. It is a reciprocal exchange of property, right and, but not excluding or, obligations. For the reciprocity, something must be given by the consumer to receive the right to “open the loot box”, to consume the virtual item to receive another one of randomized status. The game company accepts this offer and in return bestows upon the consumer the right to receive randomized rewards. If this thing to be given by the consumer is in-game currency which has been acquired by playing, does that constitute for giving something? Even though the player does not insert anything into the game, the status of the player does not remain the same, it changes towards negative. So, there is a loss of a kind. This loss is voluntarily chosen act which would have not taken actuality otherwise. This means the consumer chose to act in this way, so something is offered to be used as a method of purchase, even though nothing external has been inserted to the platform to serve as a method of payment. Also, if the same in-game currency can be bought using real money, then the in-game currency has monetary value. This further supports the idea that even an offering of in-game currency acquired by playing the game may constitute a purchase. The element of monetary value of lotteries does not require in principle that the monetary value is converted to money eventually. It

³⁸ Aichner, T. & Jacob, F. (2015) *supra nota* 21, p 257-275.

is enough that there is a benefit, the value of which can be measured monetarily. This means that it is irrelevant whether the received rewards can be transferred to other players or not. This transferring and further betting with the transferred rewards could constitute devices for lotteries or even for gambling, but that is a different topic and will not be discussed for the reasons of strict definition of the research topic. In the light of the facts presented before, the author argues that the loot boxes fulfill the criteria of non-money lotteries under the Finnish Lotteries Act §3;8.

The mechanism of the loot boxes that randomizes the reward, and then yields it to the player indeed chooses a random item to yield. This is done by either of two ways, and the game companies do not share this information with the consumers. The first of the two ways of randomizing numbers with a computer is creating data from entropy. This is done so that the computer does not give value to something and fills this empty unknown value with the result of a mathematical operation in which there are used two or more independent and non-related pieces of data to complete the operation. The independent and non-related variables are most commonly picked at the exact moment when the computing is initiated, creating truly data out of entropy.³⁹ The other method is algorithms which imitate entropy. In either case, the result is so unpredictable, and the consumer does not even have the possibility to know the factors of the mathematical operation, that the unexpectedness criterion is met.⁴⁰

Since these loot boxes do not yield monetary rewards, but rather non-money rewards, they could fulfill the definition of non-money lotteries, and if so, the game companies offering these services should therefore abide to the Finnish gambling legislation accordingly. The §3;8 of the *Arpajaislaki* states as follows: “non-money lottery means a lottery in which articles or vouchers or coupons exchangeable for articles or services can be won in a draw or in a comparable manner based on chance;”. The three elements of criteria of a lottery have been identified to manifest in loot boxes, and have been found to manifest simultaneously, making loot boxes in theory a form of lottery. Now the section of the law must be examined thoroughly whether it is fulfilled in its entirety. The next element of criteria for non-money lotteries is that: “...articles or vouchers or coupons exchangeable for articles or services can be won...”. Virtual items are indeed articles, but they are not coupons or vouchers. Also, the section states that the articles must be able to be won.

³⁹ Slomczynski, W. & Kwapien, J. & Zyczkowski, K. (2000). Entropy computing via integration over fractal measures – *Chaos*, Vol. 10, No. 1, p. 180-188

⁴⁰ Falcioni, M. & Vulpiani, A. & Mantica, G. & Pigolotti, S. (2003). Coarse-Grained Probabilistic Automata Mimicking Chaotic Systems – *Physical Review Letters*, Vol. 91, Issue 4, 044101

The randomizing effect of the unpredictable outcome fulfills this criterion. The next and the final part is: "... (can be won) in a draw or in a comparable manner based on chance.". The draw, or comparable manner refer to drawing lots, which has the same element as lotteries in general – the chooser of the lot chooses one or more option(s) from a set of seemingly similar options. The loot boxes are all similar, and even though they are identical in fact, the element of surprise of the outcome is the same. Finally, the winning must be based on chance.

The second part of the research question was that could loot boxes fit under the definition of gambling under the Finnish legislation? The answer to this can be found from the Lotteries Act §3;1-7, in which are defined the different forms of gambling under the Finnish law. In the Finnish gambling legislation, gambling is a subcategory of lotteries. The question addressing lotteries has been dealt with previously. As previously discussed in the section 1.1.1 of this work, the forms of gambling as stated in the Lotteries Act §3;1-7 are; money lotteries, betting, pools, slot machines, casino games, casino activities and totalizator betting. Loot boxes cannot be considered as money lotteries, since there is no monetary prize. In betting, there is the "opportunity to receive a share of the winnings accumulated from participation charges according to the product of the stake placed by the player and the odds indicating the probability of outcome on the basis of a guess about the results of a sporting or other competition", and there is no accumulates winnings nor a sporting or other competition. Loot boxes cannot be defined as betting either. The same argument of accumulated winning applies to pools. In slot machines money must be won, so loot boxes cannot constitute as virtual slot machines either. In casino games there are roulette, card dice or other comparable games, from which money can be won. Loot boxes do not have these qualities of comparable games, neither money can be won. Casino activities consist of casino games and slot machines, which have both been debunked, so casino activities are not a possible classification either for the loot boxes. Totalizator betting has the same qualities as betting, except it is specifically betting on horse races. Loot boxes are in no way connected to horse races, and the definition of betting is also by itself an eliminated classification option, so totalizator betting is out of the question. Since all forms of lotteries which are considered gambling in Finland under the Lotteries Act have now been exhausted and loot boxes do not match a single criterion of those, it can be deducted that loot boxes cannot be a form of gambling under Finnish legislation. As established before, they however can and do fit into the definition of non-monetary lotteries which yield articles as prizes.

2.2. Conclusions

Loot boxes can be acquired with money (charge for participation) without knowledge what virtual items the consumer will get as rewards (randomized prizes), the value of which can be calculated directly or indirectly in fiat currencies, or real money, so to speak (monetary value). This fulfills the three qualities of lotteries, which are charge for participation, randomized prizes and the monetary value of those randomized prizes. Conclusion is that loot boxes in video games constitute devices for non-money lotteries under the §3:8 of the Finnish Lotteries Act, the *Arpajaislaki*. They, however, do not constitute devices for gambling under Finnish legislation, since they do not fit the criteria of any of the forms of gambling listed in the Finnish Lotteries Act 3:1-7. However, even though the criteria for non-money lotteries is fulfilled, it is possible that there will not be any major demands from the *Arpajaishallinto* to make changes to loot boxes or to require lottery permits, since if they consider the matter to be of little significance, they can of course omit to take action. This is however only pure speculation by the author.

3. THE BRITISH PERSPECTIVE

Section 3 of Part 1 of the British Gambling Act 2005 defines gambling to be gaming, betting or participating in a lottery. It is clear that the research question fits this categorisation only partly, since the activity of opening loot boxes can be a form of lotteries, and therefore gambling, but it is necessarily gambling if it is under this act, whereas in Finnish regulation hemisphere loot boxes could be argued to present a form of lotteries, but not gambling. However, defining the question more inclusively would result in ambiguity of the research question. The British gambling authority, the Gambling Commission only interprets the law given by the Parliament, so it is not a regulating authority in the literal sense, more likely an enforcing authority, but a competent authority nevertheless. Secretary of State may provide regulations by which an arrangement that would otherwise be subject to Gambling Act 2005 will not be classified as a lottery.⁴¹ The evaluation and analysis whether the loot boxes in video games should be recognized as gambling under British law will be done from the perspective of the Gambling Act 2005 and its provisions entirely, and the Gambling Commission's position paper from March 2017 (Virtual currencies, eSports and social casino gaming – position paper) will be supplementary to this analysis and serve as an example more than as a source.

3.1. Applied legislation, regulation and statements of the competent officials

There are two sources from British jurisprudence that will be focused on;

1. Gambling Act 2005
2. Virtual currencies, eSports and social casino gaming – position paper (March 2017) - Gambling Commission

⁴¹ Gambling Act 2005, Part 1, Section 15, subsection (7)

3.1.1 Definitions of different forms of gambling

The three forms of gambling defined in the Gambling Act 2005 which could possibly constitute devices for gambling are gaming, betting and lotteries. This is further supported by the position paper of the Gambling Commission from 2017.⁴² The reason why certain specific forms of betting are not applicable to loot boxes is that in loot box opening only one person engaged in the activity at a time, and alone in that matter. This means that forms of gambling which are practised in groups are not possibly applicable.

The first of the three forms of gambling defined by the Gambling Act 2005 is gaming, which according to section 6 means “playing a game of chance for a prize”. In the context of this section, games of chance involve both an element of chance and an element of skill. This element of chance however may be superficial or only in appearance, since elements of chance which may be eliminated with superlative skill are still considered to be elements of chance. This means that all forms of poker are considered to be gambling, even though the element of chance of the card draw may be eliminated with superlative skill, the element of chance still exists within the setting inherently. The act further specifies that it does not matter whether the player plays alone, and whether the game operates mechanically or digitally.⁴³ The game of chance is considered to be ‘for a prize’ if the player acquires a chance to win the prize by taking part in the game, and it is not relevant if there is a risk of losing anything.⁴⁴ This is critical from the perspective of loot boxes. Prize, moreover, means money, or money’s worth and it includes both the prize provided by the organizer of gaming, and the winnings of money staked.⁴⁵

Only the general part of betting, as described in the first subsection of Section 9 of Part 1 of the Gambling Act will be discussed, since Spread bets, prize competitions and Pool betting require multiple persons taking part, and, but not excluding or, related sports activity. Betting generally means either making or accepting a bet for certain conditions, according to the Section 9. These conditions are an outcome of an event -either future, in process or already completed-, the likelihood of an occurrence or omission of an event, or the truthfulness of a variable. It is also irrelevant whether either party of the transaction knows the outcome of the state of affairs which is the target of the bet.

⁴² Gambling Commission Position Paper March 2017

⁴³ Gambling Act 2005, Part 1, Section 6, subsection (3)

⁴⁴ *ibid*, subsection (4)

⁴⁵ *ibid*, subsection (5)

Subsection 1 of the Section 14 of the Gambling Act states that an activity is considered to be a lottery if it fulfils either the definition of a simple lottery described in subsection 2 of the same section, or a complex lottery which is respectively described in subsection 3. In the context of lotteries the prize may be money, articles or services, or a mix of these irrespectively wheter or not these prizes come from the prizepool of money, goods and but not excluding or, services the participant(s) transferred to take part in the lottery. This means that money lotteries and non-money lotteries are not separated from each other by definition, and are not treated differently. Simple lotteries require a payment for participation, in exchange for a chance to be selected as the party to receive one or several prizes depending wholly on chance. It must be clarified that at least one party must receive a prize for the arrangement to be considered as a lottery. A complex lottery in the other hand is identical to a simple lottery, except that the allocation of prizes is determined by a series of processes, rather than one.⁴⁶ Also, the subsection 5 of the Section 14 states that a process that requires skill or judgement will be considered to wholly rely on chance if the required amount of skill and judgement does not prevent a significant proportion of participants or people willing to participate from receiving the prize. This means that if there is not a requirement for significant feat of skill or judgement, then the process is considered to rely wholly on chance.

To conclude what has been said, there are four criteria⁴⁷ that need to be fulfilled in order for an activity to be considered gambling. These four criteria are a buy-in, element of random outcome, prize of monetary value and the ability to cash out the winnings in money or in equivalent substance. This fourth requirement is found from the receiving a prize⁴⁸ of money's worth⁴⁹ - since a prize cannot be considered money's worth if it cannot be used like money, which means that the prize must be tradeable easily – in regards to gaming, from “making or accepting a bet⁵⁰”, which means that the betted amount will be reallocated to the winner of the bet⁵¹ in regards to betting, and finally regarding lotteries from the wording “in the course of the arrangement one or more prizes are allocated to one or more members of a class”⁵². The concept of money's worth should not be mixed with the concept of monetary value, since money's worth refers also to tradeability.

⁴⁶ Gambling Act 2005, Part 1, Section 14, subsection (3), paragraph (c)

⁴⁷ *Loot boxes within video games*. Gambling Commission. Accessible: <http://www.gamblingcommission.gov.uk/news-action-and-statistics/news/2017/Loot-boxes-within-video-games.aspx> , 5 May 2019

⁴⁸ Gambling Act 2005, Part 1, Section 6, subsection (4), paragraph (a)

⁴⁹ Gambling Act 2005, Part 1, Section 6, subsection (5), paragraph (a)

⁵⁰ Gambling Act 2005, Part 1, Section 9, subsection (1)

⁵¹ *What is BET?*. The Law Dictionary. Accessible: <https://thelawdictionary.org/bet/> , 5 May 2019

⁵² Gambling Act 2005, Part 1, Section 14, subsection (2), paragraph (b) and (3), paragraph (b)

3.1.2 How do loot boxes fit those definitions

In the previous chapter it was established that for an activity to be considered to be gambling under British law, it must fulfill four elements of criteria, which are a price to enter, an occurrence wholly dependent on chance, a reward that has monetary value and is of money's worth which is dispensed to the participant, commonly referred to as cashing out. Since the first three elements in the criteria are in essence the same as discussed before in the part 2.1.2 of this work, only the fourth element, the dispensing of rewards, will be discussed in this part. The first three elements (price to enter, unpredicted outcomes and monetary value of prizes) were concluded to manifest in loot boxes in 2.1.2, so therefore if the fourth criterion is considered fulfilled, it can be soundly claimed that loot boxes fulfill the criteria for gambling under British law, according to Gambling Act 2005. After this it must be inspected what kind of gambling can loot boxes constitute devices for, gaming, betting or lotteries.

In order for the reward to be qualified as being dispensed, the participant must receive either money, or money's worth. Money's worth can mean in-game currency, or money inside the platform(s) of the game service provider in this context. Money inside the service provider platform(s) cannot be considered money if it cannot be extracted from that platform, so it can only be money's worth, a debt of the service provider in benefit of the consumer, in essence. Loot boxes yield virtual items, not money, so the prizes can possibly be money's worth. On some platforms, for example in Valve's Steam, player's can sell their virtual items in exchange for money (which stays inside the platform) or other items, the value of which can be measured in money. If the virtual item received from for example a weapon case in Counter Strike: Global Offensive or from a loot crate in PlayerUnknown's Battlegrounds is sold in Steam Marketplace for money, then the received virtual item is definitely money's worth. Therefore it can be established that loot boxes which's rewards can be traded for real money, are possibly gambling. In the next paragraph author will discuss what form(s) of gambling loot boxes may constitute devices for under British Gambling Act 2005.

First, gaming shall be discussed. Gaming means playing a game of chance for a prize. As established before, games of chance involve both an element of chance and an element of skill. Loot boxes do not, however, involve an element of skill. Loot boxes do not have an element of skill in any way, so loot boxes cannot be a form of gaming under the Gambling Act 2005. In betting, a bet is placed. There is no betting in loot boxes since the money used to purchase the loot box will not be returned in any case. In lotteries, there has to be a payment, which is present in

loot boxes. Someone has to be allocated a prize, and the player always gets a prize, so this condition is fulfilled. The prizes have to be allocated wholly by chance, which is the case with loot boxes. Fulfilling this criteria, they can be seen as simple lotteries, but since they do not have the element of series of processes determining the allocation of prizes which is present in complex lotteries, they cannot fall into that category. Further in the Section 14 of Part 1 of the Gambling Act 2005 it is specified that it does not matter whether lotteries yield money, articles or services. Loot boxes yield articles, so the prizes are valid also. There is no skill involved, so it is directly established that the process is wholly based on chance, and in the case of paid loot boxes there is also a direct payment, so there is no need to evaluate whether the payment is made or not. In Schedule 2 of the Gambling Act 2005, paragraph 2 there is specified that for the purposes of lotteries paying money, transferring money's worth and "paying for goods or services at a price or rate which reflects the opportunity to participate in an arrangement" constitute as paying. Loot boxes by themselves can be argued to be money's worth if they can be sold, so in case of sellable loot boxes also the loot boxes received for free are money's worth. This would also apply to any loot box that is purchasable with real money. This means that in games where the player can sell their loot boxes, giving up the loot box earned through playing is a payment in money's worth. Therefore, if the virtual items received from the loot boxes can be traded, they constitute simple lotteries under Gambling Act 2005 if the loot boxes are bought with real money, or if the loot boxes are sellable, whether the loot box was bought or received for free.

3.2. Conclusions

In the light of what is presented before, the author argues that if the virtual items received from the loot boxes can be sold for money, loot boxes that can be bought with real money constitute simple lotteries under Gambling Act 2005. For the purposes of the research question, the author argues that under the provisions of British Gambling Act 2005, loot boxes may in some cases constitute devices for both lotteries and gambling, but all loot boxes do not constitute said devices.

4. COMPARISON OF THE FINNISH AND BRITISH PERSPECTIVES

The first difference between the Finnish and British approaches to gambling is the way they define gambling as a concept. In the Finnish terminology gambling is a certain type of activity listed on *Arpajaislaki 1047/2001*. From the Finnish perspective loot boxes cannot, by definition, be gambling but they can be and are non-money lotteries. The Finnish and British legislation have similar approaches to defining the type of activity inspected here. They both define gambling (and this applies to lotteries in Finland as well) to possess an act of initiation in which the participant must pay something to take part in the activity. In the activity itself there must be present an element of chance, which cannot be, or is very difficultly eliminated or diminished to having almost to no effect. The final common element in gambling definitions of the two jurisdictions is that the reward received by the player must be of monetary value. The difference between the two criteria set for gambling is that the British definition includes a fourth element that must be present too, the ability to cash out the money or money's worth that was won from the game. There are differences in definitions of the criteria of gambling in the approaches, but those differences make no difference in regards of the subject at hand, the loot boxes. The differences are in the wording, and in the way definitions are made, but the effective content is almost identical.

Under Finnish law loot boxes are considered to be non-money lotteries, whereas under British law loot boxes are considered to be gambling if the money or money's worth is possible to cash out in some way. If there is no way to cash out the winnings, then loot boxes are not gambling under British law, but they still can be non-money lotteries under Finnish law though. To summarize what has been said before in more general way, the difference between the Finnish and British perspectives are the term that is used to describe the activity, and the way the ability to cash out the winnings affects the status of loot boxes. All loot boxes that can be purchased with real money are non-money lotteries under the Finnish law, but only the ones of which the winnings can be cashed out constitute gambling under British law.

5. CONCLUSION

In this work loot boxes in video games were studied, and whether they can constitute devices for gambling or lotteries under Finnish and British law. The first part of my thesis covered the definition and qualities of loot boxes in their different forms and briefly the platform types on which they can appear. These are platforms on which the received digital items can be and cannot be traded with other consumers. The second part analyses the Finnish gambling legislation, and how loot boxes fit that legislation. The author found that loot boxes constitute non-money lotteries under Finnish law, and are not applicable to be defined as gambling. The third part focuses on British law, under which the author argues that loot boxes can constitute devices for gambling as long as the winnings can be cashed out. That is a defining attribute in British legislation to constitute gambling. On the fourth chapter the author concludes a short comparison between Finnish and British perspectives on the matter from the viewpoint of local gambling and lotteries legislations respectively, and found them to be very similar to each other. The main difference is that the same activity is defined in different terms, the British use the term gambling, whereas the Finnish use the term lotteries. The difference regarding gambling is that the British Gambling Act 2005 requires the winnings of the gambling activity to be possible to cash out, whereas the Finnish legislation does not require this at all, it is sufficient that the winnings have monetary value. In light of the research presented before, the author argues that loot boxes in video games constitute non-money lotteries under Finnish *Arpajaislaki 1047/2001*, and in cases of winnings that can be cashed out, simple lotteries under British Gambling Act 2005.

The author proposes that in the context of Finnish jurisprudence the possible services lawyers could offer to video game service providers would be to help to draft up new mechanics to loot boxes to circumvent the lotteries problem since commercial bodies cannot have authorisation to host non-money lotteries under Finnish law. In British context, the author proposes to keep the virtual items received from loot boxes untradeable, so there will be no way to cash out the winnings, and therefore the gambling definition is not met under the Gambling Act 2005.

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