Who really profits from the small change? 
Beginnings of the monetisation of online games

→ Bruno Vétel

Private currencies that are not recognised by national central banks are now widely used for certain everyday transactions¹. Online transactions are no exception; take the example of QQ Coins that were exchanged by millions of Chinese students using instant messaging (Tencent Inc., 1999) or, more recently, transfers using the cryptographic Bitcoin currency (Nakamoto, 2009). Digital leisure pursuits have also been caught up in the groundswell. First among these are online gambling games that have recently been opened up to competition². Video games involving small sums are less visible, but nevertheless figure among the pioneers in this sector. These artificial worlds take their inspiration directly from the first traditional role-playing games, such as Dungeons and Dragons (TSR Inc., 1974)³, creating a currency to help make the exchanges involved in these games more fluid.

These currencies, which are accumulated as players work their way through the challenges set by the game, are then spent on equipment capable of increasing the players’ chances of winning. All runs smoothly in these worlds where everything is feigned. Unfortunately, this entente comes to an end when certain players’ desire to win of encounters others’ desire to get rich in sounding and tumbling currencies. Producing game currency to sell it to those who wish to “win at all costs” can be a lucrative business.

The research on which this article is based is the result of ongoing PhD research project on the commerce in online games, whether legitimate or considered deviant. The methodology used combines the analysis of quantitative data from one online games with around thirty individual interviews focusing mainly on players, designers and vendors of virtual objects. Observation of the activities of players in the same game and on the internet sites that carry them constitutes the qualitative element.

Emergence of a “ludotariat”

Some characters in these games have comparative advantages intended to make them complementary to and interdependent with others. The possibility for players to adopt a type of character capable of accumulating game currency more rapidly than others has significant economic and social effects. Against all expectations, these players are often not content to limit themselves to the world of the game whose boundaries are defined by the software. This tiny economy often overflows into commercial online transactions. The players who have chosen the most productive character, who then defeat computer-controlled monsters, are frequently rewarded with a prize in the form of a rare object which has a substantial value in game’s currency. This type of character is thus overrepresented among players whose objective is to accumulate as much of these currencies as possible.

Based on the observation of this comparative advantage, Constance Steinkuehler⁴ describes how in the online game Lineage 2, an organised community of salaried employees made up of people paid to collect the virtual currency - the “playbour”⁵ - ended up emerging. The media usually call these illegal workers ‘gold famers’. Their activities are only illegal because the company creating the game modifies the terms of its end user licence agreement (EULA). A game like Second Life is a good example, because it encourages this type of practice. Certain players and designers of online games sometimes - with a certain measure of disdain tinged with racism - talk about ‘the Chinese’, even if nobody has been able to conduct a serious study.

A company that create online games lecture its players. Just like Joe, those who like to sell virtual currencies for Euros will end up being scammed. They would be well advised to walk away from these traders who are their “enemies”.

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¹ Private currencies
² Online gambling games
³ Dungeons and Dragons
⁴ Constance Steinkuehler
⁵ “playbour”
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to find out where they are. Sometimes, as in the case of the game we are going to study here, the respondents talk about 'bots', short for robots. They are referring to the task automation software used by some of these "game employees" to facilitate their work.

Insofar as these workers sell their capacity to produce, through a game, to companies specialising in the brokerage of virtual currencies on the internet, we prefer to use the neologism "ludotarian" drawing an analogy with the Latin verb "ludö", to play, and proletariat, etymologically "those who contribute to society solely through their capacity to reproduce". "Ludotarian" thus means "those who contribute to society solely through their capacity to produce" and we could add, not through their capacity to enjoy themselves, but their capacity to produce inside a game. Their intense, sometimes repetitive work is unusual as it takes place in a universe shared by players who are there to enjoy themselves. These workers therefore often have a bad reputation, accused by legitimate players of 'stealing' their monsters and resources and by the companies that produce the games to become parasites, making a profit 'at their expense' while spoiling the game's reputation through their all too visible presence.

These criticisms should be put into perspective in the context of the final outcome of gold farming. The currency thus accumulated is actually sold in euros on the internet to the tiny fraction of players who wish to either progress more quickly than others or at the same pace as a friend who spends more time playing. Without this, these less tenacious players would be obliged to give up the game, stop paying their monthly subscription and thus lose all access to the 'freemium' game we studied; 'freemium' meaning free-of-charge access for the first few hours of a game. The following analysis is based on observing this contradictory interdependence between the different parties, insofar as the players and employees of the companies producing the games seem to see themselves as competing with the 'goldfarmers'.

Regulation of access to currency made artificially scarce

Popular opinion holds the "ludotariat" responsible for the financial problems working for the company producing the game should theoretically be able to regulate. In practice, intervention by the company can take two forms. Firstly, it can increase the currency available in the game that had previously been programmed to be artificially scarce. This is what we were told by a 40 year old game designer, "All the basic resources, we didn’t hesitate to add them on. [...] Now there are lots, even more in the areas for beginners, because before, given that the bots were taking them, there were a lot less for the players."

The resources seized by the 'ludotarians' are proposed here as a surplus, to ensure they are available to all. The immediate consequence is to reduce competition between players for the game's currency. Secondly, rather than trying to integrate them into a system that has been made less competitive, the regulators sometimes attempt to adjust the game time necessary before a character is in a position to start accumulating large amounts of currency. A 29 year old game designer told us, "We try to gradually modify the gameplay to make the bots less viable at lower levels and force them to build a character of higher level if they want to be effective. That means we can really hurt them, since they are banished to the upper levels."

The lower level corresponds to the level of experience that the character reaches by accumulating points when it wins a challenge in the game. These levels gradually give the character access to additional skills and can increase the speed at which it generates currency. "Building a character" consists of playing for several dozen hours so that it can accumulate enough experience points. A character capable of generating large amounts of game currency thus requires the up-front investment of considerable game time or, in other words, it increases fixed costs. If a character is deleted, then for the ‘ludotarians’ it means that the substantial fixed costs represented by game time have been wasted. The regulators can thus increase the losses occasioned by this type of sanction. This limits the ‘ludotarians’ access to valuable virtual objects. Game designers are thus able to regulate the economics of games by gradually reprogramming access to artificial valuable objects. The two cases we have just discussed show that the consequences of these adjustments on the economics of a game are either to align the way the game normally works with the existing practices of the ‘ludotariat’ or to modify the game to exclude these ‘workers’. The game and its economics are thus profoundly modified by the emergence of this new group in both cases. Despite all the publishers’ attempts at regulation, these ‘playbourers’ still try at all costs to increase the currency generated per hour of game time and regularly succeed in overcoming the regulations.
The decisive factors for establishing the value of game currencies

Brokerage websites, which are considered by online game companies as illegal, centralise offers to sell online game currencies. They serve as intermediaries between player-customers and the workers who generate the game currencies. In the case of the online game that we studied, we were able to record, with the help of technical support provided by Thomas Beauvisage and Cezary Ziemlicki, the variations in the exchange rate of the currency expressed in Euros. We used a sample of five brokerage sites popular amongst players for a period of 6 months. The data collected was cross-match with publicly available statistics giving the proportion of each type of character participating in the game. A logistic regression analysis of 65,000 observations was used to interpret their fluctuations based on a set of independent variables. Variations in the exchange rate were mainly due to an increase in two types of character. The increase was responsible for a considerable decrease in the exchangerate of the currency expressed in Euros. We useda sample of five brokeragesites popularamongst playersfor a period of 6 months. The data collected was cross-match with publicly available statistics giving the proportion of each type of character participating in the game. A logistic regression analysis of 65,000 observations was used to interpret their fluctuations based on a set of independent variables. Variations in the exchange rate were mainly due to an increase in two types of character. The increase was responsible for a considerable decrease in the exchange rate that corresponded to the types of character widely used by ‘ludotarians’ to accumulate currency. This article does not attempt to address the issue of the theft of character accounts belonging to legitimate players through phishing.

As game designers are well aware of the abuse of certain characters, it seems strange that they have not completely removed the potential for it from the computer code that regulates the economics of the game. Having reminded us that the game in question is ‘freemium’, meaning that the access is free-of-charge, one of the designers explained this apparent paradox:

“We started to impose restrictions on the character accounts of non-subscribers who do not have the right to perform certain exchanges and then the bots began to subscribe. It’s a bit frightening because it means they’re still profitable. […] now we have loads of bot subscriptions and that creates a problem (he pauses) with the management that does not want to impose sanctions on the bots. They fear we could lose revenue.”

As the team of designers was not in a position to completely preclude the activities of the ‘ludotarians’, management ruled in favour of maintaining the company’s revenues. Management was confronted by discredited ‘ludotarians’ who were nevertheless, and paradoxically, an integral part of the mechanics of the game thanks to the regulation undertaken by the game designers. Management decided to encourage these ‘workers’ to subscribe in the interests of profitability. However, in the medium term, this sort of decision represents a considerable risk for the game’s reputation. Hitherto restricted to certain areas of the game, the ‘ludotarians’ rapidly found themselves present in large numbers in all geographical parts of the game universe.

Conclusion

The existence of a class of organised ‘workers’, made up of players who are prepared to produce large sums of the currencies of certain online games, obliges the designers to take this activity into account by modifying the rules of the game. Online game environments consequently include new regulatory mechanisms and yet cannot completely prevent these deviant practices. The latter in fact depend on the complementarities between the game’s characters, the very means used by the designers to encourage social interaction between the players. In most cases, video game designers introduce these complementarities between the characters as part of their capacity to generate revenue. For example, warriors are very often rewarded for discovering magic scrolls normally dedicated to magicians, giving rise to subsequent monetary exchanges between these two types of character.

As we have seen, the social structure of these online games does not allow for the expulsion of these ‘illegal workers’ unless a number of the principles of complementarity that underlie the social aspect of these online games are abandoned. In the case of this game, the ‘freemium’ business model is subject to these social rules, which ensure the interdependence between the characters. It is therefore not surprising that the behaviour of the companies creating the games ends up reinforcing the social integration of the ‘ludotarians’ in the environment of the game. This explains one of the reasons for which the purchase of virtual currencies using real money has gradually become subject to legitimized integration over the past few years: companies aim to reap the benefits by replacing the services previously offered by the ‘ludotariat’ with a proprietary offer.

8. See other works by the same author https://webperso.telecom-paristech.fr/vetel.html