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Digital Games and The City: About Reality, Commuting and Gamification

Abstract: This paper is part of a research on gaming and reality carried out by the Laboratório de Poéticas Fronteiriças, a research group rolled on the CNPq's directory and certified by the UEMG (Brazil). Growing number of phone programs that provide ride-share services, transportation, or product delivery, primarily food, remind us of old games that use similar mechanisms. Our aim is to analyze the games series *Crazy Taxi* and *Grand Theft Auto*, their narrative and aesthetic elements as well as similarities to the Uber app in order to better understand ways the gamification of such types of apps can allow a re-signification of the city spaces, its users as players and of its socio-economic impact.

Keywords: digital games; virtual reality; cities; Uber; commuting.

Introduction

This paper is part of a research on games and reality carried out by the Laboratory of Front Poetics¹, a research, innovation, and development group on the CNPq's directory and certified by the UEMG. We will present a bibliographical review and an analysis of two games accompanied by a comparative study with an urban transportation program. Considering the growing number of phone programs being developed, with the purpose of 'car ride', transportation services or even delivery of products, especially food, we can easily recall a few old video games that use similar mechanisms, such as use of map and the need for player (or user) to be in motion. Based on the context mentioned above, this paper discusses the relationship between game and reality.

*Crazy Taxi*² is a series of racing games developed by Hitmaker and published by SEGA, with its first game hitting the market in 1999, primarily in the arcades. The

¹ <http://labfront.weebly.com> – CNPq/UEMG.

² Hitmaker, *Crazy Taxi*, Sega, 1999.

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goal of the game is to board and deliver passengers to their destinations as quickly as possible. Provided with a map to guide him around, the player loses credits if the delivery is not made on time and receives extra credits if the delivery time is met.

Grand Theft Auto (popularly known by the acronym *GTA*)³ is a game series that revolves around the exploration of its open world, where the player can travel long distances, by car or on foot, accomplishing missions, often with a time limit.

Ride-sharing apps (such as Uber, Cabify, and Lyft, among others) work similarly. Such apps can be linked to games by using some of their elements, including map, user's (driver's) pay according to the length of their trajectory, and by archiving data of each of the rides so that it becomes possible to observe a specific user's travel history.

The presence of game elements in situations that go beyond the game context is known as gamification, where “like some other forms of virtual work, blurs the line between ‘work’ and ‘leisure’”⁴. Having that in mind, discussions are emerging about how apps take part in this gamification context, not only through their interface and graphic elements, but also by mixing boundaries between work and leisure, between social and game realities in a more fluid and clear way.

However, Uber, a ride-sharing and food delivery app, is already available in 60 countries around the world, with more than 10 billion singular uses made since it was created in 2010⁵. Uber is not the only company that provides these kinds of services but is certainly the largest and the most popular one today. The app's existence is so embedded in daily life and popular culture that it is common to hear the company's name mentioned in movies or tv shows, as well as hearing its users saying its name even when using another app (“I'm calling an Uber”), having become synonymous with a transportation service.

According to Nick Yee⁶, the relationship between work and play has the potential to become indistinguishable. Digital games – usually seen as an entertainment activity – are increasingly being recognized as a stressful and laborious activity that requires time and energy, demanding us to work for them, preparing and training us for the work environment. Understanding this makes it possible for us to analyze the relationship between games and reality. We can research how these two are intertwined and how they modify one another so we can understand how the gap between apps like Uber and games like *GTA* or *Crazy Taxi* is a complicated problem, especially if we restrict the analysis to the mechanics of interaction.

This is the perspective that we intend to take in order to discuss the gamified aesthetics of transportation apps. We are going to use Uber as an example to better understand the relationship between games and urban spaces, seeing that it is the environment used as a base for both *GTA* and *Crazy Taxi*, as well as Uber's trips. In order

³ Rockstar North, *Grand Theft Auto*, Rockstar Games, 1997.

⁴ Miriam Cherry, “The Gamification of Work,” *Hofstra Law Review* 40, 4 (January 1, 2012): 851–58.

⁵ Mansoor Iqbal, “Uber Revenue and Usage Statistics (2024),” *Business of Apps*, January 15, 2024, <https://www.businessofapps.com/data/uber-statistics/>, acc. on February 25, 2024.

⁶ Nick Yee, “The Labor of Fun: How Video Games Blur the Boundaries of Work and Play,” *Games and Culture* 1, 1 (January 2006): 68.

to achieve this goal, besides this introduction and the final considerations, we divided our paper into three (3). In the first part we discuss the relationship between games and reality. In the second section, we discuss the games' movement mechanics and, by comparison, how mobility occurs through the use of apps throughout the city. In the third section, by taking Uber as an example, we analyse how the aesthetics of games spills over to the social reality through the process of user (driver/passenger) ludification and also bring to light the discussions that are emerging as criticism of these types of apps.

Reality and games

The world-wide known board game *Monopoly* was released in 1935 by Charles Darrow, at the time working for Parker Brothers, a US children's product company. The game consists of several pieces (pawns), which represent each player, a dice, and fake money bills. The players wait their turn to roll the dice and see how many blocks, or spaces, they can 'walk' on the board; each block represents a street or a city. Once inside the block, if the player has enough money he/she can purchase a house on a spot represented by a placement. If the player ends up in a block that is already owned by another player, he must pay rent to the landlord. The player who possesses more houses, and thus more money, wins the game.

As we can see, the relationship between *Monopoly* and real-life elements is blatant. The board game was created, decades before its release, by Elizabeth Magie Phillips, an anti-monopolist who developed two versions of the: one where all players would win when riches were created, and the other where the objective of the game was the same as we know it to be nowadays.⁷ Despite the creator's goal for the game to be a sign of "protest against the big monopolists of her time"⁸, once it was made available for mass consumption, the players chose to try and achieve on the board, something that in real life would be more difficult and take more time.

There is a well-known saying that games imitate life. We could use this expression to explain why, by getting rid of social and economic hindrances, prejudices, and obstacles, the *Monopoly* game became popular by giving its players a way to achieve a goal that is practically impossible in social reality. The game, therefore, creates a version of reality that is desired by its players, who then seek to carry certain features and actions of the game dynamics into their social and environmental interactions, in order to be able to get closer to what they can experience in the game. In a feedback loop the game goes on adapting and incorporating transformations that society and people went through, developing its own methods and mechanisms, at the same time, being influenced by, and influencing, our social reality.

⁷ Mary Pilon, "Monopoly Was Designed to Teach the 99% about Income Inequality," *Smithsonian Magazine*, January 2015, <https://www.smithsonianmag.com/arts-culture/monopoly-was-designed-teach-99-about-income-inequality-180953630/>, acc. on February 25, 2024.

⁸ Mary Pilon, "Monopoly's Inventor: The Progressive Who Didn't Pass 'Go,'" *The New York Times*, February 13, 2015, sec. Business, <https://www.nytimes.com/2015/02/15/business/behind-monopoly-an-inventor-who-didnt-pass-go.html>, acc. on February 25, 2024.

In such a manner, we can see the complexity of the development of what we understand as “games”, since its interrelation with our reality, even as a representation, seems to be a fundamental characteristic for its existence. This ends up straining what Huizinga, Dutch historian and linguist, describes as “play is not ‘ordinary’ or ‘real’ life. It is rather a stepping out of ‘real’ life into a temporary sphere of activity with a disposition all of its own”⁹ This goes back to what Jane McGonigal writes on the inherent fear coming from human thoughts about games, where what we really worry about is losing control, “we’re afraid of losing track of where the game ends and where reality begins.”¹⁰

In his book *Homo Ludens*, Johan Huizinga describes how the game, the act of playing, predates human culture, existing even among animals, thus not being able to be credited to us, since “The very existence of play continually confirms the supra-logical nature of the human situation.”¹¹ Huizinga writes the following:

In tackling the problem of play as a function of culture proper and not as it appears in the life of the animal or the child, we begin where biology and psychology leave off. In culture we find play as a given magnitude existing before culture itself existed, accompanying it and pervading it from the earliest beginnings right up to the phase of civilization we are now living in.¹²

Therefore, we can understand the game and the development of culture by looking beyond the representational dimension inside the games. Our interactions, created over time, during the act of playing, eventually led to the development of important aspects of social interaction and social reality.

It is crucial to highlight here that, despite starting this paper by bringing examples of present-day games, the concept of playing we use here as a basis has been in accordance with Huizinga’s¹³ descriptions of it. Researchers understand the game as a shared action that brings forward new experiences, making possible the creation of language, myths, behaviours, among others. Games have become popular in different cultures by amplifying the aesthetic potential in the dynamics of human relationships. Once we clear the way for this notion of game, through its possibilities, we begin to treat it as a reflection and, at the same time, as a component of our reality.

Social reality’s close connection to games was also used as an enhancer for new situations. Games in which their dynamics serve as preparation for social situations have gradually emerged and been refined, shaping a ‘primitive’ instance of serious games. In his paper “From Visual Simulation to Virtual Reality Games”,¹⁴ Michael

⁹ Johan Huizinga, *Homo Ludens* (London: Routledge & Kegan Paul, 1981), 8.

¹⁰ Jane McGonigal, *Reality Is Broken: Why Games Make Us Better and How They Can Change the World* (New York: Penguin Books, 2011), 20.

¹¹ Huizinga, *Homo Ludens*, 3.

¹² *Ibid.*, 4.

¹³ *Ibid.*

¹⁴ Michael Zyda, “From Visual Simulation to Virtual Reality to Games,” *Computer* 38, 9 (September 2005): 25–32.

Zyda says that serious games can be understood as a “mental contest, played with a computer in accordance with specific rules, that uses entertainment to further government or corporate training, education, health, public policy, and strategic communication objectives.”¹⁵ Digital games weren’t responsible for connecting the ludic with the ‘real’, but their aesthetics enables, through audiovisual and interactive expression, a direct connection between reality and game reality, understanding the way we perceive game beyond its representations’ specificity.

Peter Berger and Thomas Luckmann describe the concept of reality as “a quality appertaining to phenomena that we recognize as having a being independent of our own volition (we cannot ‘wish them away’).”¹⁶ In their book *The Social Construction of Reality*, the authors talk about reality as independent from human will. Berger and Luckmann amplify the discussion about how our reality is a social construction, in such a way that the understanding of reality is dependent on a social relativity built through the positioning and action of individuals in that society. To researchers, our consciousness work, which is entirely voluntary,¹⁷ leads to the construction of different spheres of reality; such as the reality of our dreams and other people’s reality. We choose to become conscious of these other realities but we understand our daily reality as the primary and the most organized one.

It is important that we highlight Johan Huizinga’s stance, once that game allows for a diverse understanding of reality. Huizinga understands the game as a separate line of thought where we “express the structure of mental and social life.”¹⁸ “Laughter” has a function, in this context, of human social elevation. For the author, laughter highlights the difference between what humans understand as games and what other animals understand as games, bringing exclusivity to the human game that allows for a development of reality.

Although game and comedy are not intertwined, the “not serious”,¹⁹ the act of laughing, through playing a game, allows for an exit from our social reality by being conscious of its place. It’s the aesthetic existence, however, that solidifies the reality of games in confluence with our social reality. The discussion here presented involves not only the aesthetic side, with its visual elements and its sounds, as well as the easily recognisable digital game elements, but also its order, its rules and physical, or mental, manifestation as well as other aspects always present in the act of playing.

The potency of game realities seems to go even further as it is. By ‘shifting’ their place,²⁰ games are able to connect with different types and levels of narratives, shifting

¹⁵ Ibid., 26.

¹⁶ Peter L. Berger and Thomas Luckmann, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge* (London: Penguin Books Limited, 1991), 13.

¹⁷ Pilon, “Monopoly’s Inventor: The Progressive Who Didn’t Pass ‘Go.’”

¹⁸ Huizinga, *Homo Ludens*, 7.

¹⁹ Ibid., 45.

²⁰ Pablo Gobira, “Comentários Perfunctórios Sobre Jogos Digitais E Seu Potencial Narrativo,” in *Design+: arte, ciência e tecnologia: conexões teórico-práticas*, ed. by Débora Aita Gasparetto (Santa Maria RS: Editora PPGART, 2017), 134–140.

between media, establishing a link with different industries in a way that “roots the game into society”.²¹ The game culture and universe are intertwined on diverse levels. The development of digital games created an additional connection between these spheres. The aspect of narration, potentialized by the solidification of digital games as a creative industry,²² allowed for a clearer exchange of aesthetic values. This exchange happens between digital games and our social reality through a qualitative equivalence between what is built through games (even more in digital games sourced from and influenced by the industry expansion) and the construction of ‘real’.

The aesthetic aspect of a ludic reality, in digital games, appears through direct representation of the elements that are in dialogue with our social reality. Huizinga believes that the act of representing things inside games is a way of transporting a specific aspect inside the ludic reality, which then creates an execution of appearances²³. On the topic of movement within games (that will be further discussed in the next section), we have an equivalence of its elements with our reality’s characteristics: both games here analysed happened in a ludic reality similar to physical environment (or a type of physical place: the urban scene) that exists in our social reality.

Crazy Taxi brings forward specific elements from the places around the state of California, in the United States, while *GTA* creates its own cities, based on existing ones. The maps of those cities dialogue with maps that people use to localize themselves along the cities, its buildings, streets, commercial areas, economic hubs, other cars, etc. All the narrative, audiovisual and interactive elements allow for an expansion of our reality. But what is the difference between this genre of games’ aesthetic dimension and a game like Monopoly?

The answer is in the post-digital presence that the game industry has in our reality through not only its products, but also in its manner of production. Although a person may not have a game console or does not even play games, he/she will experience typical game mechanics in certain periods or sectors of their productive life. These mechanics are present through a boost of playing in our society, even though not all people are able to identify it in their daily lives, they can notice it in their aesthetic correspondents, such as, for example, in the ride sharing apps.

This way, by dislocating inside the map in the game, through their avatar, we can say that there is a transposition of the player inside the universe of the game, allowing for its extrapolation. Therefore, can we say that the player, even though through a representation of themselves, is moving? How can we understand this relationship when we analyze the ride sharing apps where our avatar’s movements are entirely reliant on the user’s physical movements?

²¹ Ibid., 137.

²² Ibid.

²³ Huizinga, *Homo Ludens*.

Commuting and games

In this section we will analyze the relationship between the act of moving around that we do in our socially constructed reality and the games here mentioned. Our analysis stems out of the assumption that we can recognize the gamification of reality on an immersive level thanks to the use of ride sharing apps. To enter into this debate, we will start by understanding the meaning of movement.:

Though a recurring concept, we are not utilizing the verb here in its physical understanding, which is to dislocate a body with a variation of its position in a modular space, with a way and direction, in a set amount of time. In the contemporary society that we live in, “movement” is understood as a material and a symbolic practice, a way to change our position in space through separate interests (work, going shopping, etc.), due to a social order, that predates, in society, the birth of individuals, in the same way our mother tongue has been taught to us since infancy.

The Situationist International (SI, 1957–1972) was an avant-garde organization whose member artists and scholars – or, how they preferred to be called: situationists (they denied previously existing descriptions) – acted against the spectacularization of society. Some authors consider SI the last historical avant-garde movement.²⁴ In order to reflect on the approach to movement in games and cities through the use of a ride sharing app, we need to understand the importance that city and urban sphere as a whole have for this organization.

In their searches for surpassing art, the situationists realized that the prerequisite for the integration of art and life would be a critical approach to urban planning.²⁵ People move in search of work opportunities and leisure.²⁶ Within a predetermined architecturally limited geographical space (city, neighborhood, country), a person moves through streets with the intention of getting to work or reaching a specific leisure goal.²⁷ The act of moving belongs to the social order, it has a goal, milestones, divisions and, usually, there isn't a way of altering the path in any groundbreaking manner.

Such reflection is based on the notion of *dérive*, present in the practical theory of the situationists.²⁸ To them, the proposition of *dérive* proves and, in a theoretical-practical action, denies spatial similarities that exist in urban centers all around the world, ruled by politics and economy, seeing that all cities have: economic hubs, political hubs, recognizable shopping areas, streets for car traffic only, pedestrian

²⁴ Mario Perniola, *Os Situacionistas: O Movimento Que Profetizou a “Sociedade Do Espetáculo”*, 1st ed. (São Paulo: Annablume, 2009).

²⁵ Paola B. Jacques, “Apresentação,” in *Apologia da Deriva: Escritos Situacionistas sobre a Cidade*, ed. Paola B. Jacques (Rio de Janeiro: Casa da Palavra, 2003), 13–36.

²⁶ Guy Debord, “Teoria da Deriva,” in *Apologia da Deriva: Escritos Situacionistas sobre a Cidade*, ed. Paola B. Jacques (Rio de Janeiro: Casa da Palavra, 2003), 87–91.

²⁷ Abdelhafid Khatib, “Esboço de Descrição Psicogeográfica do Les Halles de Paris,” in *Apologia da Deriva: Escritos Situacionistas sobre a Cidade*, ed. Paola B. Jacques (Rio de Janeiro: Casa da Palavra, 2003), 79–84.

²⁸ Debord, “Teoria da Deriva”.

streets, etc. All of this creates a rationality that belongs specifically to a hegemonic way of life.

The understanding of movement as an aesthetic quality can be processed in the digital games and through the apps here used for reference, not in a theoretical-critical way, like the situationist did, but incorporated to our socially experienced reality. This incorporation happens through the game industry, where studios utilize the movement in game dynamics such as *GTA* and *Crazy Taxi*, as well as in the ride sharing apps.

In both of those – apps and games – we see the city through a lens of repetition of patterns and places that the workers need to go to in order to do their daily tasks. Going to work, visiting family and friends, going shopping, amongst other situations, are acts of urban movement that are repeated cyclically through the use of the software. Parallel to that, in the games, the avatar needs to walk through a specified path in order to complete its missions. In *GTA* the missions involve the need for stops in different locations to acquire objects that enable the player to complete their missions through the city environment being reproduced on screen, while in *Crazy Taxi* the mission is to move. In a way, this is the same *modus operandi* of the social understanding of movement. In order to get to work and complete their tasks, workers unavoidably have to move to certain places in time not to be punished or be penalized, in a way that moving is an integral part of their job.

Playing games, by enabling an escape from the social reality to a ludic one, transports the player to an universe where they are represented. Through the use of their avatar, that works as the player in the ludic reality, they are able to perform interactions with the environment and the architecture of the place they were inserted in. In order to complete missions that happen on different levels of the game, the avatar needs to follow the predetermined path and do certain specific actions, similar to what happens in our social reality on a day-to-day basis.

Having in mind the relationship between ludic and social realities, studies have for some time now tried to explain physical changes developed in players during the act of playing.²⁹ However, it is not necessary to study the immersion of the player in order for us to consider that they move through the execution and perception of movement inside the virtual reality. The movement in games, such as in the two being analyzed here, makes for a cognitive correspondent of moving in social reality, where the act of moving around the city is also representative aesthetically in an app. In both scenarios, the signalisation of a correspondent of such cognition happens through possibilities of interaction with an interface developed according to similar patterns that take into account the user's experience.

What allows for such precise convergence of realities is its aesthetic existence, that creates unique user interaction elements. Such similarities are of no surprise, if we remember how intertwined games and culture are.

The gamification of reality happens all the time. The only way in which the game can actually shape and transform reality in a way that goes beyond a supporting role

²⁹ Rosilane R. Mota and Francisco C. Marinho, "Jogo Digital: Aspectos Psicofisiológicos no Processo de Imersão," in *SBC – Proceedings of SBGames* (Rio Grande do Sul: Porto Alegre, 2014), 1145–54.

inside culture is that, as the situationist explained a few decades ago, “the new game affirmation phase should be characterized by the removal of all elements of competition.”³⁰ Once we erase the function of competing, of winning, the use of games no longer would be subject to the examples here analyzed.

By bringing the situationist critique to this paper we aim to shed light on the aesthetic character present in a specific social reality, which the ride sharing apps as well as the games’ ludic realities take advantage of in their reference to the urban dimension.

The aesthetics of games spreads around the city

Uber is an American multinational company founded in 2009 in California. Uber, or Über, is a word of German origin that means ‘above’ or ‘over’. Its English version takes a slightly different meaning slightly different, bringing an idea of ‘superiority’, ‘improvement’, used frequently as a slang. Its creators’ goal was to enable the same type of ride service as a cab but with a better experience.³¹ Cabify was created in 2011 by a Spanish businessman offering services similar to the ones available in Uber.³² Similarly, Lyft³³ appeared on the market in 2012 with its solidarity rides. The increase in the number of these companies is of no surprise, if we have in mind evolutionized presence of technology in our daily lives and, more specifically, the gamification of social spaces. The convenience provided is that we no longer need to go to bus stops or subway stations. Furthermore, a big difference to cabs, their predecessors, is that users know the price of their rides in advance, which outweighs the fear of invasion of privacy coming from the intrusive permissions required to download the application, and as well as the blurring of the ‘line’ that separates reality and game.

This condition of reality occurs not only for the users who need to go somewhere, but also for those who put their own vehicles at disposal, in exchange for a fee, to make such trips possible. Compensation received for the completed ride is the incentive they have to provide this transportation to others, in a similar way to the games described here, that reward their users with points, or other (digital) objects (serving as an advantage in the plot), when they move around the map, accomplishing their mission. In fact, there is a *GTA* modification, called *RideShare*,³⁴ that simulates the work of a ride share app driver, revealing the overlap between the game and the

³⁰ Internacional Situacionista, “Contribuição para uma Definição Situacionista de Jogo,” in *Apologia da Deriva: Escritos Situacionistas sobre a Cidade*, ed. Paola B. Jacques (Rio de Janeiro: Casa da Palavra, 2003), 60–61.

³¹ Julia Marquers, “O que Significa Uber? Confira Perguntas e Respostas sobre o Aplicativo,” *TechTudo*, June 15, 2019, <https://www.techtudo.com.br/noticias/2019/06/o-que-significa-uber-confira-perguntas-e-respostas-sobre-o-aplicativo.ghtml>, acc. on July 13, 2024

³² Manuel A. Arce, “Cabify, La Competencia de Uber se Prepara para Operar en Costa Rica,” *La Nacion*. <https://www.nacion.com/economia/negocios/cabify-la-competencia-de-uber-se-prepara-para-operar-en-costa-rica/UTJMTPKNYNGHNP3BPPI5LPU3RM/story/>, acc. on February 25, 2024.

³³ Christina Farr, “Lyft Team Gets \$60M More; Now It Must Prove Ride-Sharing Can Go Global,” *Venture Beat*, <https://venturebeat.com/2013/05/23/lyft-races-ahead-with-60m-in-funding-but-what-challenges-lie-ahead/>, acc. on August 21, 2024.

³⁴ Keith, *Rideshare*, Grand Theft Auto V: Rockstar Games, 2017.

transport app. In 2015 Uber also launched a mobile app that simulated, in a digital game format, the experience of working as a driver in the software. The goal, according to the developer's company management, was both to train their partners as well as to attract new potential drivers.³⁵

This illustrates how digital games and social reality are increasingly connected, especially in the context of work. If previously it was necessary for us to use boards or other devices (such as dice, for example, or other types of objects) to realize the aesthetic dimension of playing games, nowadays, thanks to the social connection enabled through the technological advances, gamification is something very common in our reality.

Understood as “the idea of using game design elements in non-game contexts to motivate and increase user activity and retention”³⁶, however, the development of ride sharing apps brought to light specificities thanks to its use.

We can also observe, in the beginning of the 20th century, the first steps of gamification. Some of them were proposed by Vladimir Lenin and later by Josef Stalin, as analyzed by Mark J. Nelson. The author describes the developments of the 20th century putting under a magnifying glass the Soviet Union's strategies,³⁷ such as the socialist monetary alternative to boost work and competition to encourage workers. In order to guarantee good production, Stalin awarded the best factories with fake palm trees for their decoration. Likewise, in order to encourage its employees, Uber awards drivers that have high approval ratings not only through monetary gains but also with gifts and discounts.

As observed by Nelson, the work environment in the late 20th century was characterized by non-monetary payment as one of the encouraging strategies alongside with gamification. In the author's opinion, and with Andersen's analysis³⁸ as its basis, the gamification processes are likely to blur hierarchical structures. Uber's positioning showcases such characteristics, with an asymmetric relationship with its drivers. As told by Rosenblat and Stark, Uber normally refers to partners and not workers or employees. The company is also clear in their contracts that they aren't a transportation company, but a technology company, obviating the drivers' labour laws.³⁹

We can consider that the idea of gamification is one of the fundamental pieces of what, for some authors, would be the ‘virtual work’, consolidating its position by

³⁵ Maggie Zhang, “UberDRIVE: A Mobile Game to Recruit and Train Uber Drivers,” *Forbes*, June 12, 2015, <https://www.forbes.com/sites/mzhang/2015/06/12/uberdrive/?sh=6179705061ac>, acc. on February 25, 2024.

³⁶ Sebastian Deterding, Dan Dixon, Rilla Khaled, and Lennart Nacke, “From Game Design Elements to Gamefulness: Defining Gamification,” *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments* (Finland: MindTrek, 2011), 9–15.

³⁷ Mark J. Nelson, “Soviet and American Precursors to the Gamification of Work,” in *MindTrek 2012: Proceeding of the 16th International Academic MindTrek Conference* (2012), 23–26.

³⁸ Niels Åkerstrøm Andersen, *Power at Play: The Relationships between Play, Work and Governance* (New York: Palgrave Macmillan, 2009).

³⁹ Alex Rosenblat and Luke Stark, “Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers,” *International Journal of Communication* 10, 0 (July 27, 2016): 27.

enabling a further, more practical, entanglement of work and leisure.⁴⁰ Once a driver downloads the Uber app, or any other previously mentioned app, the similarities between its platform and those in digital games becomes obvious.

Under the pretext of enabling a flexibilization of work, by making available a platform where independent transportation workers are solicited by users/passengers, Uber started to be seen as an alternative to the traditional workplace market, where employees would have more freedom and control over their routine and earnings. The perspective therefore becomes – you earn according to work you do. What, at first, seemed like a good solution was the way in which this app managed to root itself ubiquitously into our social reality, mixing its digital platform with our day-to-day life.

Considered a ‘soft power’, this flexibilization and apparent autonomy that drivers have, works in a way so that the control over their routines and work is performed in an almost imperceptible manner.⁴¹ As independent employees, Uber drivers aren’t required by law to fulfil a predetermined workload. An audiovisual, interactive and narrative aesthetic, similar to the ones used in video games, is implemented, after a carefully done research by Uber with social scientists and analytic scientists,⁴² so that they are able to create in the user the will to continue its trajectory, in the same way in which a GTA player is influenced to complete a new mission by the game’s applied mechanisms.

One of the techniques used in parallel to the motives introduced in video games is called the “ludic loop”. The “ludic loop” presents to the user (or player) a “progress toward a certain goal that is always just beyond the player’s grasp.”⁴³ This type of action is implemented by Uber, and its rivals, making it so that the drivers are attracted to their platform, repeating the attraction made so that they would offer their services in the app for the very first time.

By removing from the equation, the regulation about the obligations between employer and employee, giving the users more ‘freedom’, there is a decrease of cost to the companies, once they no longer go through the traditional work regulations, such as signed labor, unemployment checks, life insurance, amongst many other statutory rights. The drivers, on the other hand, aren’t forced to be on the streets ready to drive passengers that need a ride during all hours of the day. However, in spite of everything, drivers are inserted into a social form, not much different from the one existing inside regular jobs. This is the aesthetic dimension that makes us believe that the driver has an option, once they are given an idea that they are also a “user” on the app, a “user-driver”. The gamification aesthetic elements, or the gamification elements, are important so that the platform’s interface there is a reinforcement of this idea.

Seeing that such companies operate exactly with the intent of enabling transportation anywhere at any time, they are entirely reliant on their drivers’ availability

⁴⁰ Cherry, “The Gamification of Work.”

⁴¹ Rosenblat and Stark, “Algorithmic Labor and Information Asymmetries: A Case Study of Uber’s Drivers.”

⁴² Noam Scheiber, “How Uber Uses Psychological Tricks to Push Its Drivers’ Buttons,” *The New York Times*, April 2, 2017, <https://www.nytimes.com/interactive/2017/04/02/technology/uber-drivers-psychological-tricks.html>, acc. on February 25, 2024.

⁴³ Paul Olyslager, “How Uber Gamification Manipulates Drivers,” *Paul Olyslager*, 2017, <https://www.paulolyslager.com/how-uber-gamification-manipulate-drivers/>, acc. on February 13, 2024.

to fulfill tasks, in such a way that non-coercive mechanisms need to be implemented in order to boost the users' will to continue executing their function.⁴⁴

The conduction of the 'user-driver' to a gamified reality also transforms their perception of the physical space, in a way similar to a digital game. One of the aesthetic aspects present in transportation service's apps is the maps corresponding to the place in which the user is located. In this map, through visual hotspots, places where one can find a higher number of people soliciting their work are highlighted, which leads to an increase in their earnings. The passengers thus represent the missions available in digital games, and the money corresponds to the scores. In order to conclude their mission, or their ride, and be able to receive money, drivers need to take their passengers from starting to destination point indicated on the map in their phone. Driver needs to move in a social reality's recognized physical space with his/her phone's GPS turned on, so that they can be monitored and localized by the platform.

Although the gamification aspect of this app brings excitement and euphoria, few end up staying as drivers for longer periods of time. Not even 50% of its users stay available to Uber after one year of starting to use the platform.⁴⁵ This is mostly due to the employer-employee relationship insecurities, that are showcasing a "significant information and power asymmetries between the two"⁴⁶.

The 'freedom' that such work bases itself on doesn't mean challenges only for the companies to attract drivers, but also creates disadvantages to those working for these companies. Drivers need to fit into the way such platforms work, which includes low ride fares and the impossibility of choosing or getting to know before-hand which passenger they will be driving,⁴⁷ making it impossible to create changes to such mechanisms due to the informality in which they operate.

Final considerations

Although there are certain reservations in the way that these companies operate, ride sharing apps are, currently, one of the clearer examples of work gamification, even more so when we take into consideration the aesthetic manifestation that they use, making their ludic dimension even more apparent. Such changes to the work structure and modifications to the way employees perform their duties also involves the combination of culture and games that Huizinga analyzes in his book.⁴⁸ Transportation services' softwares and digital games show the gamified elements of the work economic structures and strengthen their characteristics through gamification.

⁴⁴ Sarah Mason, "High Score, Low Pay: Why the Gig Economy Loves Gamification," *The Guardian*, November 20, 2018), <https://www.theguardian.com/business/2018/nov/20/high-score-low-pay-gamification-lyft-uber-drivers-ride-hailing-gig-economy>, acc. on February 25, 2024; Olyslager, "How Uber Gamification Manipulates Drivers;" Scheiber, "How Uber Uses Psychological Tricks to Push Its Drivers' Buttons."

⁴⁵ Jonathan V. Hall and Alan B. Krueger, "An Analysis of the Labor Market for Uber's Driver-Partners in the United States," *ILR Review* 71, 3 (June 29, 2017): 705–32.

⁴⁶ Rosenblat and Stark, "Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers."

⁴⁷ Ibid.

⁴⁸ Huizinga, *Homo Ludens*.

We believe that the combination of games and social reality will become even more present in our daily lives; the distinction between what is or isn't playing will decrease, in the same way that we saw in the Situationist International members,⁴⁹ with the removal of the difference between political economy's aesthetics and arts' aesthetics that they experimented with, and with the critical approach to the urban space through the notion of *derivé*.⁵⁰

Finally, we see how the boundary between game reality and socially constructed reality becomes blurred. This comes not only from the technologies applied in day-to-day life, but also from the ways in which games and play are adapted to the current political and economic reality. More than this, the political economy that has elevated digital games to a major industry for some decades now also assimilates these games as part of the political-economic reality which structures the relationships in social reality.

Lastly, it isn't uncommon to see that the aesthetic/gamified elements present in one, or more, industries in political economy, such as the ones we've analysed in the digital games present in this paper, once well received, can blend into our socially constructed reality, seeing that they never stopped being part of it, even though present only inside the games. If that was the case, such games wouldn't present representation of people, streets, sidewalks, maps, buildings, amongst others, recognisable in different cultures across the globe.

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⁴⁹ Internacional Situacionista, "Contribuição para uma Definição Situacionista de Jogo."

⁵⁰ Debord, "Teoria da Deriva."

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