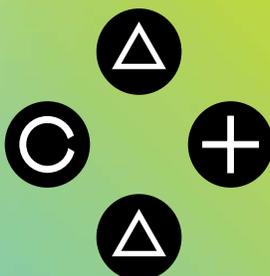# Acta Ludologica

Faculty of Mass Media Communication

June 2020

Theory
Education
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Journal Orientation

Acta Ludologica is a scientific journal in the field of games and digital games. The journal contains professional scientific reflections on digital games; it also offers academic discourses on games, especially media and digital competencies, creation, design, marketing, research, development, psycho-logy, sociology, history and the future of digital games and game studies.

Acta Ludologica is a double-blind peer reviewed journal published twice a year. It focuses on theoretical studies, theoretical and empirical studies, research results and their implementation into practice, as well as professional publication reviews.

Editorial

The Year of Great Expectations… and Disappointments

The patience of gamers, actually the whole digital-gaming community, has never before been tested to such an extent as last year, and 2020 should be the year of rewards for all of that patience. The lengthy waiting for large and highly anticipated game titles is quite normal within the digital-gaming sector, but in this case, the line has been crossed. Obviously, mainly titles are to blame – the new cyberpunk hit from the renowned Polish studio standing behind the remarkable The Witcher series, and the sequel to the multi-award winning zombie-like post-apocalyptic PlayStation exclusive classic, charged by a strongly emotional story.

The first, Cyberpunk 2077 from CD Projekt, was originally announced back in 2012, so gamers have been teased by various marketing related to this game (including the casting of Keanu Reeves) for eight long years. In 2018, the game was confirmed for all main gaming platforms, and at E3 2019, a release date of April 20, 2020 was announced. Happiness has short-lived, because even as the year began, the release was delayed until September 17th. The second, The Last of Us: Part II from Naughty Dog and Sony Interactive Entertainment has been postponed from February 2st1 to May 29th, 2020 (although rumours also spread about December 31st, 2019) in the autumn of 2019. As if that was not enough, the COVID-19 outbreak has globally paralyzed most economic sectors, and following the logistical problems caused another delay, a new (hopefully the last) release date of The Last of Us: Part II was set to June 19th, 2020. Gamers now have no choice but to hope that their patience (and in many cases the money they spent on pre-orders) will be rewarded as it was with the equally delayed Doom Eternal that exceeded all expectations on March 20th. The COVID-19 pandemic is an unpredictable variable that could further complicate things, but it is worth noting that, fortunately, of all sectors, it has probably affected digital-gaming the least.

However, many scientific game conferences have been postponed or cancelled because of the pandemic, game research has not stopped, as evidenced by this issue. The game studies section consists again of various topics present in digital games' discourse. For example, Martin Boszorád investigates the intermedial aspects of the film and digital games relationship. Sherry Yi analyses the serious side of satirical digital games, and thus how satirical games can provide serious content within the game-based learning framework. The theoretical potential of the digital-gaming principle, the butterfly effect, in the ethical education inspired by the game Detroit: Become Human is examined by Lenka Magová. Silvester Buček and Martina Kobetičová deal with the topic of establishing new genres within digital games, while focusing on the growing Auto Battler class.

Against the atmospheric background of the recently released Doom Eternal, our interview with the iconic game developer, John Romero, returns to the original Doom as well as discusses Romero's legacy for the present and future of the gaming sector. Scientific reviews of the game Detroit: Become Human and two new publications are followed by a special edition of News that deals with the impact of the COVID-19 pandemic on the digital gaming-sector in detail. At the end, within Add-ons, Juraj Malíček develops his reflections about games and toys.

In conclusion, even though the postponements of the abovementioned highly expected titles marginally affected the content of this issue (e.g., a planned review of The Last of Us: Part II, the release of which unfortunately did not meet the editorial deadline), I believe it will fulfil readers' expectations.

Zdenko Mago
Acta Ludologica's Editor-in-Chief

Contents

Watch a Film, Play a Game – Play a Film, Watch a Game: Notes on the 'Intermedia-Presence' of Digital Games in Cinema

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Martin Boszorád received his PhD. in the field of aesthetics after earlier studies in aesthetic education and German language and literature. He is currently the head of the Institute of Literary and Artistic Communication (Constantine the Philosopher University in Nitra, Slovakia). His research interests include mainly the theorization of popular culture (in a wide sense). He has co-authored two monographs and five textbooks and has written around twenty-five scientific papers published in diverse journals and collective volumes at home and abroad and more than five dozen literary or film reviews and popularizing articles devoted to the contents of (pop)culture.

ABSTRACT:
The present study does not approach digital games per se and in accordance with the, so to speak, matter-of-course habitus, i. e. within the frame of game studies discourse (regardless of the ludology-narratology debate and probably even continuing tension), but rather in a wider cultural context and that by following essentially their relations to other cultural contents and phenomena, cinema in particular. Hence the intermediality discourse is within the pursued reflection applied as, from the point of view of the author, a fruitful framework. Intermediality can be legitimately approached as such a relation between media which, as Petr Szczepanik[1] puts it, 'creates indivisible fusions'. If we accept this thesis and utilize it as a starting point, film – connecting image, word and sound – appears to be intermedial apriori. On the basis of this and in connection with digital games (which, by the way, can be in terms of the aforementioned understood as intermedial a priori, too), such cinematic works of art – naturally, *pars pro toto* – are in the centre of interest here in which the a priori intermedial character of film is in a sense amplified or rather brought to a square (film as 'intermedium[2]') – in this case and context by evincing ties, implicit and/or explicit, to digital games.

KEY WORDS:
digital games, experience, film, intermedia, intermediality.

Introduction: Theme Song... in a Loop

What can be perceived at least from the beginning of the third millennium as an undisputable, even ontological and – although there is a lot of supporting evidence also having the shape of various scientific outputs (papers, books, research projects, conferences etc.)[2] – axiomatic fact is that the intermediality discourse is lively indeed. After all, as Jan Schneider already stated in 2008, "the word intermediality has in the contemporary discourse on culture become a relatively frequent term which is modern but also fashionable".[3] What is, however, more important is the conclusive efficacy of intermediality

1   For more information, see: SZCZEPANIK, P.: Intermedialita. In *Cinepur*, 2002, Vol. 9, No. 22. [online]. [2020-03-14]. Available at: <http://cinepur.cz/article.php?article=5>.
2   See also: PETHÖ, Á.: Approaches to Studying Intermediality in Contemporary Cinema. In *Acta Universitatis Sapientiae, Film and Media Studies*, 2018, Vol. 15, No. 1, p. 165-187. [online]. [2020-03-14]. Available at: <http://www.acta.sapientia.ro/acta-film/C15/film15-09.pdf>.; PETHÖ, Á.: Intermediality in Film: A Historiography of Methodologies. In *Acta Universitatis Sapientiae, Film and Media Studies*, 2010, Vol. 20, No. 1, p. 39-72. [2020-03-14]. Available at: <http://www.acta.sapientia.ro/acta-film/C2/film2-3.pdf>.; KOŘENSKÝ, J.: Intermedialita – intertextualita – multitextualita – hypertextualita?. In SCHNEIDER, J., KRAUSOVÁ, L. (eds.): *Intermedialita: slovo – obraz – zvuk. Sborník příspěvků ze sympozia*. Olomouc : Univerzita Palackého, 2008, p. 9-11.; SCHNEIDER, J.: Intermedialita: Malá vstupní inventura. In SCHNEIDER, J., KRAUSOVÁ, L. (eds.): *Vybrané kapitoly z intermediality*. Olomouc : Univerzita Palackého, 2008, p. 5-15.; SIMONIS, A.: *Intermediales Spiel im Film*. Ästhetische *Erfahrung zwischen Schrift, Bild und Musik*. Bielefeld : transcript Verlag, 2010.; Remark by the author: Determinative are within the discourse also various and, in fact, numerous considerations and discussions on the topic (and, naturally, also beyond the sphere of cinema) written by globally recognized intermediality-oriented 'theoretical headliners' such as Werner Wolf, Irina Rajewsky, Jens Schröter and/or Jürgen E. Müller.
3   SCHNEIDER, J.: Intermedialita: Malá vstupní inventura. In SCHNEIDER, J., KRAUSOVÁ, L. (eds.): *Vybrané kapitoly z intermediality*. Olomouc : Univerzita Palackého, 2008, p. 5.

aptly expounded by Á. Pethö as follows: "If we look at the bigger picture, without any doubt, in the past two decades 'intermediality' has proven to be one of the most productive terms in the field of humanities generating an impressive number of publications and theoretical debates. This popularity of intermedial researches was prompted by the incredibly accelerated multiplication of media themselves that called for an adequate theoretical framework mapping the proliferation of media relations. The other factor that propelled 'intermediality' to a wider attention was most likely the fact that it emerged on an interdisciplinary basis that made it possible from scholars from a great number of fields (theories of literature, art history, music communication and cultural studies, philosophy, cinema studies, etc.) to participate in the discourse around questions of intermediality".[4] It remains to be added that the notion of intermediality seems to be productive not only in connection with traditional arts or rather media but also in connection with digital games – and especially when, as here, their links or interrelations with other contents of culture are followed.

With regard to everything that has happened in the field of art theory, film studies, media studies etc. at least within the frame of the second half of the 20th century and the first two decades of the 21st century it appears to be completely legitimate to understand film as art as well as a medium. And it seems completely legitimate even despite the fact that one can here and there actually come across calling into question the art-like nature of film *in toto* (for instance in connection with blockbuster films or particular genres) or the autonomous/specific media identity of film. Whereas generally it can seem problematic[13] to approach digital games as works of art (although, as for instance Bartosz Stopel[5] argues, probably not entirely justly), it shouldn't appear questionable to approach them as a medium, even an expressive one.[6] Yet, in a sense (in fact mainly on the level of language games) it can be – and, as a matter of fact, in connection with film as well as digital games. Because when it comes to the media identity of both film and digital games, things can get complicated, which is distinguishable also in the following questions formulated by Á. Pethö: "Is film one medium among several others in our culture is it one that combines more than one? Is film (even in its traditional form) an 'intermedium', a 'composite' medium, in other words, perhaps the ultimate 'mixed' or 'hybrid' medium that combines all kinds of media in its texture of signification? Or should we more likely regard it merely as a 'place', a 'field' where intermedial relationships and/or media transformations can occur?".[7] Similarly, the same goes for digital games. For instance, J. Švelch writes about digital games as a multimedia phenomenon (referring to Marshall McLuhan) and then a transmedia phenomenon (referring to Jesper Juul).[8] He also mentions another important substance-related issue that could be epitomized in the form of a question similar to the questions asked above by Pethö: Is a game an artefact or an activity?[9]

However, if we – mainly in order to avoid getting trapped in an explication-loop forever – accept the stated point of view, i.e. if we understand both film and digital games as media, the observation of their relationship through the lens of inter-mediality (word division added to emphasize the semantics) simply can't be regarded as improper. Film and digital games, especially as we know and experience them today, have a lot in common. B. Stopel[10] writes terms about „video games/cinema proximity". As the author points out, the influencing or rather the "inter-change" between film and digital games is conclusively reciprocal. The aesthetic experience elicited by film is at its core as a rule synesthetic[11] and in connection with the senses relatively complex. The situation concerning the aesthetic experience raised by digital games is similar. On the other hand, the crucial difference, and also regarding the aesthetic experience, is the absence (film) or, on the contrary, presence (digital games) of interactivity. Since this is an absolutely banal rule, so to speak, of (aesthetic) engagement, it comes as no surprise that it can be found in almost every consideration touching upon – centrally as well as peripherally – the topic of digital games-related experience. And the papers of this kind cited in the bibliography below prove it, too: "Although we tend to appreciate many visual, aural, compositional and art-historical qualities of games and films in largely similar ways, interactivity shifts the appreciative focus towards gameplay, exploration, richness of world structure (video games often have much larger storyworlds, populated by vast numbers of characters, than do individual films) or the architectonics of plotlines".[12]

What's particularly significant in the context of the present study, film and digital games – both being syncretic, both creating as a rule 'indivisible fusions'[13] – can be understood as phenomena which are basically intermedial a priori.[14] After all, when reflecting on transmedia storytelling and seriality, M. Kudláč postulates this: "Notwithstanding the comparatively short history of the video game medium, its syncretic practises are well able to provide a convergent platform in which previous forms are absorbed, as cinema had formerly done by integrating the tradition of theatre, art, literature and music".[15] In addition, it's not only the tradition itself that is 'imbibed', it's also the (f)actual language or rather the defining means of expression. And this is where it gets interesting within the frame of the present consideration. Naturally, the matter of the media identity of film and digital games as well as the matter of their richly nuanced interrelationships – and also from the point of view of intermediality – are far more saturated, far more complicated and far more complex than clarified above. However, with regard to the object of interest here such an explication-shortcut is by all means acceptable. After all, we focus on just

4   PETHÖ, Á.: Intermediality in Film: A Historiography of Methodologies. In *Acta Universitatis Sapientiae, Film and Media Studies*, 2010, Vol. 2, No. 1, p. 40. [online]. [2020-03-14]. Available at: <http://www.acta.sapientia.ro/acta-film/C2/film2-3.pdf>.
5   STOPEL, B.: On Botched Cinematic Transformations of Video Games. In CALLAHAN, D., BARKER, A. (eds.): *Body and Text: Cultural Transformations in New Media Environments*. Cham : Springer, 2019, p. 178-181.
6   For more information on understanding digital games as expressive medium, see: ŠVELCH, J.: Co nám říká hra. Teoretické a metodologické přístupy k počítačové hře jako expresivnímu médiu. In *Iluminace*, 2012, Vol. 24, No. 2, p. 33-48.; Remark by the author: Interestingly, Jaroslav Švelch finds the strongest argument for the „digital games as medium"-approach in the cultural practice.; ŠVELCH, J.: Co nám říká hra. Teoretické a metodologické přístupy k počítačové hře jako expresivnímu médiu. In *Iluminace*, 2012, Vol. 24, No. 2, p. 34.
7   PETHÖ, Á.: Intermediality in Film: A Historiography of Methodologies. In *Acta Universitatis Sapientiae, Film and Media Studies*, 2010, Vol. 2, No. 1, p. 48. [online]. [2020-03-14]. Available at: <http://www.acta.sapientia.ro/acta-film/C2/film2-3.pdf>.
8   ŠVELCH, J.: Počítačové hry jako nová média. In *Mediální studia*, 2008, Vol. 3, No. 1, p. 11-12. [online]. [2020-03-14]. Available at: <https://medialnistudia.fsv.cuni.cz/front.file/download?file=2008_01_01_svelch.pdf>.
9   ŠVELCH, J.: Co nám říká hra. Teoretické a metodologické přístupy k počítačové hře jako expresivnímu médiu. In *Iluminace: Časopis pro teorii, historii a estetiku filmu*, 2012, Vol. 24, No. 2, p. 35.

10   STOPEL, B.: On Botched Cinematic Transformations of Video Games. In CALLAHAN, D., BARKER, A. (eds.): *Body and Text: Cultural Transformations in New Media Environments.* Cham : Springer, 2019, p. 176.
11   Remark by the author: An interesting reflection of the synaesthesia-intermediality relation offers Astrid Winter.; For more information, see: WINTER, A.: Intermedialita a synestezie. In SCHNEIDER, J., KRAUSOVÁ, L. (eds.): *Intermedialita: slovo – obraz – zvuk. Sborník příspěvků ze sympozia.* Olomouc : Univerzita Palackého, 2008, p. 27-43.
12   STOPEL, B.: On Botched Cinematic Transformations of Video Games. In CALLAHAN, D., BARKER, A. (eds.): *Body and Text: Cultural Transformations in New Media Environments.* Cham : Springer, 2019, p. 183.
13   Remark by the author: Petr Szczepanik uses this collocation to characterize the outcome of intermediality.; SZCZEPANIK, P.: Intermedialita. In *Cinepur*, 2002, Vol. 9, No. 22. [online]. [2020-03-14]. Available at: <http://cinepur.cz/article.php?article=5>.
14   Remark by the author: Put differently, according to Joachim Paech, "(f)ilm is from its beginning an 'intermedia fact'".; PAECH, J.: The Intermediality of Film. In *Acta Universitatis Sapientiae, Film and Media Studies*, 2011, Vol. 4, No. 1, p. 7. [online]. [2020-03-14]. Available at: <http://www.acta.sapientia.ro/acta-film/C4/Film4-1.pdf>.; Remark by the author: Similarly sees the film also Petr Szczepanik.; See also: SZCZEPANIK, P.: Intermedialita. In *Cinepur*, 2002, Vol. 9, No. 22. [online]. [2020-03-14]. Available at: <http://cinepur.cz/article.php?article=5>.
15   KUDLÁČ, M.: Transmedia Storytelling: The Many Faces of Video Games, Fluid Narratives and Winding Seriality. In CALLAHAN, D., BARKER, A. (eds.): *Body and Text: Cultural Transformations in New Media Environments*. Cham : Springer, 2019, p. 192.

a specific appearance of the film-digital games relation – the 'intermedia-presence' of digital games in cinema. In these terms and based on the already mentioned notion of film being intermedial a priori it is the aim, referring to our prior study in the field of cinema,[16] to address such cinematic works of art which by evincing ties to digital games and thus amplifying the very intermedial nature of film function as what we suggest to denote by the expression 'intermedia[2]'.

In general there are numerous examples of what we understand as cinematic 'intermedia[2]'. To mention some of them: musical films like, for instance, Damien Chazelle's *La La Land*[17] (2016) (music-film interrelation), Ang Lee's *Hulk*[18] (2003) (comics-film interrelation), Gustav Deutsch's *Shirley: Visions of Reality*[19] (2013) (fine arts-film interrelation), Baz Luhrmann's *Moulin Rouge*[20] (2001) (theatre-film interrelation), Peter Greenaway's *Prospero's Books*[21] (1991) (literature-film interrelation) etc. Interestingly, cinematic 'intermedia[2]' often put emphasis on one 'component' of film as an 'indivisible fusion' – i.e. image (Dorota Kobiela's and Hugh Welchman's *Loving Vincent*[22] – 2017, word (Marc Foster's *Stranger Than Fiction*[23] – 2006), sound (Ola Simmonson's and Johannes S. Nilsson's *Sound of Noise*[24] – 2010).[25] Furthermore, there are also numerous examples of such cinematic 'intermedia[2]' which encapsulate at their very core the digital games-film interrelation. Three of them – namely Tom Tykwer's *Run Lola Run*[26] (1998), Edgar Wright's *Scott Pilgrim vs. the World*[27] (2010) and Ilya Naishuller's *Hardcore Henry*[28] (2015) – are fragmentary reflected onwards and that because in a way they, as we endeavour to demonstrate, represent three different appearances of the 'intermedia-presence' of digital games in cinema by, within a frame of almost two decades (17 years – from 1998 to 2015), evincing different grades of implicitness/explicitness and, overall, the extent of what's observed here. What's additionally interesting is that all three films can be comprehended as experimental since they, so to speak, cross the usual borders and conventions of cinema as a medium as well as as an art form.

Even with respect to everything formulated so far, it should be clear that regarding the actual subject matter or rather reflected material and also regarding the concept of the study per se we can't and do not intend to touch on all the films which are somehow tied to digital games. Many particular works of art and also such that are current and interesting examples of what is in the centre of our interest here are simply put aside – like, for example, Steven Spielberg's *Ready Player One*[29] which is not only heavily game-like but as an adaptation of a novel also literature-related and therefore intertextual as well as intermedial at its very core. It also should be clear that we do not want to deal with the intermedial interrelations between cinema and digital games overall (in terms of this, for example, cinematic adaptations of digital games-pretexts are almost completely, so to speak, outside our visual field). In addition, it is really important that by reflecting particular cinematic works of art on the platform of partial, comparison-based interpretations we actually are interested in just one side of the film-digital games relationship, although it

may seem that the title of the study prefigures something else. However, what the play on words in the two-part title really refers to is the ambiguous semantics of the verb "to play" which as a matter of fact connects and at the same time sets digital games and cinema apart. While in the first part of the title we refer to the process of engaging in a recreational activity (a game), the process of taking part in it, in the second part we refer not, as could be expected, to the game-like dimensions of particular cinematic artefacts (experimental or conventional) but to the action by which a film as a rule is, so to speak, set in motion preceding its reception. In this sense one can, and being absolutely truthful, state that a film – unlike digital games – simply is and is not played at the same time. The play on words in the title, the same play on words which is profoundly linked to the act of reception (the act of watching a film or playing a game and also – to certain extent synthetizing – watching a game-like film), at the same time can be understood as a hint regarding our methodology, as that already – although rather implicitly – has been indicated above. The intermedial interrelations between cinema and digital games are thus framewise observed here from the methodological positions of experience-based and interpretation-based aesthetics or rather pragmatist aesthetics (as they are epitomized by the approach of R. Shusterman particularly also in connection with popular culture[30]).

Opening Cutscene(s)

A character of a young woman fights together with her companions in a series of captivating, vivid and all senses addressing sequences of action first against three samurai-like giants, then steampunk-inspired Nazi zombie soldiers, then orcs while trying to get inside a castle inhabited by dragons and eventually futuristic robotic guards on a train. Moreover, in connection with each of those missions the 'woman-characters squad' has to – and outside of each of the mission's environment itself – gain achievements (map, lighter, kitchen knife). Although these images may be heavily reminiscent of a level-based digital game, in fact they synecdochically represent the plot of Zack Snyder's *Sucker Punch*[31] (2011). Another, more realistic, example of a film resembling a digital game in terms of its structure/composition is *The Raid: Redemption*[32] (2011) directed by Gareth Evans.) Captured in low graphics quality a character of a man moves quickly on a street, collects a syringe, goes on a rampage, shoots some other characters, then moves even more quickly until eventually his overstrained heart explodes and the 'game over' notification appears. This probably could be a fragment of a GTA-like digital game (similar on the game series *Grand Theft Auto*[33]), in fact it's a hidden post-credits sequence from Mark Neveldine's and Brian Taylor's *Crank*[34] (2006). Another – and regarding the context completely different – example of such a use of a digital-games reference and in this case within the film itself can be found in the Slovak partly live-action and partly animated docudrama *True* Štúr[35] (2015) directed by Michal Baláž and Noro Držiak. The character of the Slovak language's codificator Ľudovít Štúr is in a particular *Mortal Kombat*[36]-like sequence displayed as fighting against his ideological opponent, count Karol Zay (Picture 1). The post-credits sequence from *Crank* can be, however, approached also as an intermedial Easter egg

16   BOSZORÁD, M.: *Film ako „intermédium" na druhú.* Paper presented at XIX. Czech and Slovak Filmologic Conference with the theme Obraz – slovo – zvuk. Krpáčovo, presented on 19th October 2019.
17   CHAZELLE, D. (Director): *La La Land (2016)*. [DVD]. Santa Monica : Summit Entertainment, 2017.
18   LEE, A. (Director): *Hulk (2003)*. [DVD]. Los Angeles : Universal, 2003.
19   DEUTSCH, G. (Director): *Shirley: Visions of Reality (2013, Dual Format Edition)*. [Blu-ray & DVD]. London : Eureka Entertainment, 2018.
20   LUHRMANN, B. (Director): *Moulin Rouge (2001)*. [DVD]. Los Angeles : 20th Century Studios, 2001.
21   GREENAWAY, P. (Director): *Prospero's Books (1991)*. [DVD]. New York : Allied Artists, 2016.
22   KOBIELA, D., WELCHMAN, H. (Directors): *Loving Vincent (2017)*. [DVD]. London : Altitude FIlm, 2018.
23   FORSTER, M. (Director): *Stranger than Fiction (2006)*. [DVD]. Culver City : Sony Pictures, 2007.
24   SIMONSSON, O., NILSSON, J. S. (Directors): *Sound of Noise (2010)*. [DVD]. New York : Magnolia Pictures, 2012.
25   BOSZORÁD, M.: *Film ako „intermédium" na druhú.* Paper presented at XIX. Czech and Slovak Filmologic Conference with the theme Obraz – slovo – zvuk. Krpáčovo, presented on 19th October 2019.
26   TYKWER, T. (Director): *Run Lola Run (1998)*. [DVD]. Culver City : Sony Pictures, 1999.
27   WRIGHT, E. (Director): *Scott Pilgrim vs. the World (2010)*. [DVD]. Los Angeles : Universal, 2010.
28   NAISHULLER, I. (Director): *Hardcore Henry (2015)*. [DVD]. Burbank : STX Entertainment, 2016.
29   SPIELBERG, S. (Director): *Ready Player One (2018)*. [DVD]. Burbank : Warner Bros, 2018.

30   For more information, see: SHUSTERMAN, R.: *Pragmatist Aesthetics: Living Beauty, Rethinking Art.* Oxford : Blackwell, 1992.
31   SNYDER, Z. (Director): *Sucker Punch (2011)*. [DVD]. Burbank : Warner Bros, 2011.
32   EVANS, G. (Director): *The Raid: Redemption (2011)*. [DVD]. Culver City : Sony Pictures, 2012.
33   ROCKSTAR NORTH et al.: *Grand Theft Auto (series)*. [digital game]. New York : Rockstar Games, 1997-2013.
34   NEVELDINE, M., TAYLOR, B. (Directors): *Crank (2006)*. [DVD]. Santa Monica : Lionsgate, 2007.
35   BALÁŽ, M., DRŽIAK, N.: *True* Štúr. 2015. [online]. [2020-03-14]. Available at <https://www.rtvs.sk/televizia/archiv/9578/78439>.
36   MIDWAY et al.: *Mortal Kombat (series)*. [digital game]. Chicago : Midway, 1992-2019.

present in a film and at the same time referencing digital games per se. There are more examples of such a creative strategy in cinema, one of them being, for instance, the appearance of Pac-Man on a map depicted in a scene from *Tron*[37] (1982) directed by Steven Lisberger.

Picture 1: The character of Ľudovít Štúr in a Mortal Kombat-like sequence
Source: author's screenshot; BALÁŽ, M., DRŽIAK, N.: *True Štúr.* 2015. [online]. [2020-03-14]. Available at: <https://www.rtvs.sk/televizia/archiv/9578/78439>.

A character of a seriously wounded man, at first with a gas mask on, is exiting a building, a few steps from the exit another character of a man with a gun approaches him from behind, suddenly the point of view changes, the camera and thus the viewer enters the head of the first man, then a subtle flash of light appears, the man (and with him the viewer who is, so to speak, at this moment walking in his shoes) stops, lurches and eventually falls to the ground. This easily may be an actual cutscene from a *first-person shooter* (FPS), but in fact it's a short sequence preceding the finale of Luc Besson's *Léon: The Professional*[38] (1994). Another – and by much voluminous – example, regarding the aesthetic experience, of an immersive usage of the FPS-point of view (subjective camerawork) within the frame of an actual film is the iconic, about 5-minutes long sequence in *Doom*[39] (2005) directed by Andrzej Bartkowiak.[40] By the way, a FPS-like sequence is also used at the very beginning of the abovementioned *Crank* depicting the main character as he wakes up and begins to realise why he is feeling so weird (which the viewer can experience to certain extent because of the subjective perspective experience).[41]

37   LISBERGER, S. (Director): *Tron (1982).* [DVD]. Burbank : Disney, 2002.
38   BESSON, L. (Director): *Léon – The Professional (1994, Uncut International Version).* [DVD]. Culver City : Sony Pictures, 2000.
39   BARTKOWIAK, A. (Director): *Doom (2005).* [DVD]. Los Angeles : Universal, 2006.
40   Regarding this sequence, see: BEIL, B.: *First Person Perspectives. Point of View und figurenzentrierte Erzählformen im Film und im Computerspiel.* Münster : Lit Verlag, 2010, p. 84-87.
41   Regarding an analysis and interpretation of this sequence, see: BEIL, B.: *First Person Perspectives. Point of View und figurenzentrierte Erzählformen im Film und im Computerspiel.* Münster : Lit Verlag, 2010, p. 108-112.

Clap 1: Run, Protagonist, Run

Run Lola Run directed by Tom Tykwer, one of the most highly regarded contemporary German personalities in the field of cinema, is regarding its very nature an eloquent object of interest when it comes to intermediality (and, moreover, an internally polymorphous one). At least two aspects of the film are in this context – and apart from relationships to digital games – worth the attention and just as pretty apparent: 1. The opening credits sequence which is animated and cartoon-like stylized. (What's not less important here, Tykwer also uses animation within the structure of the narrative itself, when basically separating its partly varying but for the most part actually repeating segments.); 2. The aesthetic experience of Tykwer's feature film is heavily defined by its 'musicality' since the rhythm of the film felt by the viewer in the process of perception is heavily defined by the rhythm of the employed music, particularly by the machine-like beat of electronic (techno) music (Picture 2).

Picture 2: The character of Lola captured by the camera from the side while running
Source: author's screenshot; TYKWER, T. (Director): *Run Lola Run (1998).* [DVD]. Culver City : Sony Pictures, 1999.

In terms of digital games-film interrelations the most important element of Tykwer's cinematic work of art is its structure/composition. *Run Lola Run* consists mainly (there are also two – more lyrical than narrative – 'intermezzos') of three alike episodes whereby each of them ends differently (two of them with death – once of Lola and the other time of Manni, her boyfriend). In this sense Tykwer's film resembles a game play, where the player has as a rule three lives at his disposal. He makes an attempt to complete the mission and when he fails, he has the opportunity to make another attempt – naturally, trying to do something differently, i.e., so to speak, revisit his actions. Similarly, that's what Lola does within the frame of the film. Thus, by using time loop and narrative cyclicity, Tykwer basically appropriates the 'mission failed – restart' logic or rather, mechanism. In addition, since the protagonist is almost constantly in motion – running – while often being in the environment captured by the camera from the side, *Run Lola Run* can be at least partly viewed as a cinematic response to side-scrolling digital games filled with action and, because pushed for time (and, figuratively speaking, threatened by the edge of the screen), thrill or tension.

Clap 2: Run, Protagonist and Player, Run (and Beat 'em Up)

Similarly to *Run Lola Run*, *Scott Pigrim vs. the World* directed by Edgar Wright, one of the most innovative contemporary film-makers in general and a popculture-fanboy body and soul, is incredibly saturated in terms of intertextuality as well as intermediality. First of all, it's important to mention that the film as such is an adaptation[42] of a comic book series written and drawn by Brian Lee O'Malley. And what's also significant, the film points to its comics-roots conspicuously – from sounds being heard as well as visualised on the screen (for example, when the telephone rings) through appearing verbal time and place specifications to sequences in which the main female character Ramona Flowers retrospectively narrates micro-stories encapsulating her past relationships, sequences which actually set black-and-white and, regarding the style, manga-inspired and thus the pretext-inspired comic panels in motion right before the eyes of the viewer.

Picture 3: The character of Scott gaining an extra life
Source: author's screenshot; WRIGHT, E. (Director): *Scott Pilgrim vs. the World.* [DVD]. Los Angeles : Universal, 2010.

Concerning digital games-film interrelations, Wright's film is, similarly to Tykwer's, structured as a game. What's however, different is the game which is used as the model. The narrative of *Scott Pilgrim vs. the World* is in terms of composition built as a level-based game and, in addition, a fighting and also a beat 'em up game. After all, the character of Scott Pilgrim has to stepwise/levelwise fight former lovers of Ramona on a platform of close combat in order to, so to speak, have the opportunity to win her love. Furthermore, in the finale of the film Scott has to fight a relatively large number of opponents before eventually getting into a battle with the ultimate villain, the boss-like character of Gideon. Nevertheless, there are many other elements borrowed from digital games – for instance,

the mechanism of earning an extra life (Picture 3) or special features, namely the Power of Love-sword or the Power of Self-Respect-sword. Although not repeatedly or as complexly used as in *Run Lola run*, the "mission failed-restart" mechanism is used also in Wright's film – within the frame of the final battle. Not to mention some other partial and for non-players often not as explicit references to the sphere of digital games – like, for instance, the usage of the music borrowed from the game series *The Legend of Zelda*[43]. In comparison to *Run Lola Run* the ending is also interesting. In both films the ending is happy, wherein a pair of lovers leaving the scene hand in hand is depicted. However, Wright's film is manifestationwise more open since after Scott and Ramona disappear behind a white door, the camera moves up and captures a countdown appearing in the sky accompanied by a simple and game-related question: 'Continue?'.

Clap 3: Run, Protagonist, Player and Viewer, Run (and Shoot 'em Up)

As a film embodying in a sense the peak and simultaneously the trough of digital games-film intermedial relationships, the directorial debut of Ilya Naihuller *Hardcore Henry* can be understood On one hand the film is strongly and intransigently holding on to its (inter)medial 'template', namely first-person shooter games, on the other hand by exactly doing this the film – perhaps paradoxically – points, especially in connection with aesthetic experiences raised by it, to its own limits as well as the limits of the cinematic medium in general. Representing what could be denoted as an 'ultra-action' game-like film, Naishuller's experimental piece basically reanimates the Frankeinstein subject-matter (Frankenstein-like character) within the context of a storyline resembling a mission-based digital game in which the main character has to –usually by following instructions – get to a location and there carry out a particular action just to gain the opportunity to undergo generally the same only in different particular circumstances. Clearly at first sight, *Hardcore Henry* 'confesses' to inspiration taken from digital games by the usage of the subjective camera. Although such a creative strategy, without doubt connecting the cinematic work with first-person shooter games, may seem attractive because being not conventional in film, it has, as B. Beil[44] calls it, 'deficits'. Beil mentions in this context three problems of subjective camera: the subject getting into a blind spot, the difference between real, natural seeing and the filmic image pretending it and the limitations concerning different expressive qualities of film (for instance, the pace of action or the act of editing).[45] Whereas – if the first deficit is taken into consideration – in digital games the problem of the 'missing' subject can be compensated for example by using cutscenes depicting the subject from the outside, in a film where the hero is faceless for the whole time it really is a problem. And even the mental projection of the viewer into the body of the protagonist while watching the film (and not actually playing it like a game) doesn't solve it sufficiently.

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42   Remark by the author: By the way, the comic book series was also adapted into a side scrolling beat 'em up game entitled *Scott Pilgrim vs. the World: The Game* (2010).; UBISOFT: *Scott Pilgrim vs. the World: The Game*. [digital game]. Montreal : Ubisoft, 2010.

43   NINTENDO et al.: *The Legends of Zelda (series)*. [digital game]. Kyoto : Nintendo, 1986-2019.
44   BEIL, B.: *First Person Perspectives. Point of View und figurenzentrierte Erzählformen im Film und im Computerspiel.* Münster : Lit Verlag, 2010, p. 68-70.
45   Ibidem.

However, the creators of *Hardcore Henry* counterweight in a sense the limits of the aesthetic experience related to film (and not to digital games)[46] and also the deficits of the subjective camera by winking at the audience and especially at the gamers in it. The protagonist, while being barefoot, stumbles over something painfully or falls off a horse, when he intends – maybe encouraged by idyllic Western-music – to ride it. This almost definitely would not happen in a digital game. Such jokes or ironic gestures are used repeatedly in Naishuller's film– Queen's *Don't stop me know*[47] featured in a sequence following the 'kick' raised by some item from a first aid kit, caricatural usage of player's personalisation mechanism (concerning the voice) or, symptomatically, the opening credits as such which combine some euphonic and non-disturbing music and explicit images of pure violence in slow motion (for instance, a knife slowly penetrating someone's neck). With regard to all this *Hardcore Henry* is probably not to be understood as a digital game-like film, which, although trying hard, isn't able to replicate digital games as its model fully, but rather as a filmic pastiche honouring digital games per se – appreciatively albeit with a pinch of irony. In addition, Naishuller's film is maybe more about life and humans in general as it may seem, after all, as J. Malíček put is, "(a) typical 'Doom-like' hero is basically a metonymy of a human in an existential situation" (Picture 4).[48]

Picture 4: The character of Henry while being on his 'existential' mission
Source: author's screenshot; NAISHULLER, I. (Director): *Hardcore Henry (2015)*. [DVD]. Burbank : STX Entertainment, 2016.

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46   Remark by the author: Referring to thoughts of Jaroslav Švelch (although put out of original context), the viewer can interpret, while the (active) player can interpret and configure.; ŠVELCH, J.: Počítačové hry jako nová média. In *Mediální studia*, 2008, Vol. 3, No. 1, p. 14. [online]. [2020-03-14]. Available at: <https://medialnistudia.fsv.cuni.cz/front.file/download?file=2008_01_01_svelch.pdf>.
47   QUEEN: *Don't stop me know. Track No. 12 on the Studio Album Jazz by Queen*. [CD]. London : EMI Records Limited, 1979.
48   MALÍČEK, J.: Videohra – výrazový prostriedok populárnej kultúry v postmodernej situácii. In PLESNÍK, Ľ., ŽILKOVÁ, M. (eds.): *O interpretácii umeleckého textu 23. Pragmatika vyjadrovacích prostriedkov umenia*. Nitra : UKF in Nitra, 2001, p. 126.; Remark by the author: Excerpt ad hoc translated from Slovak original by the author of the present study.

Conclusions: Closing credits

The field of inter-relations between film and digital games – the field where film studies, game studies, intermediality studies etc. touch, overlap and perhaps even collide in a sense – is far more internally structured than we were understandably able to clarify. Thus it's natural that there are many points of view on how to observe and analyse the, so to speak, ontological closeness of the two media. For instance, J. Stallabras simply argues that computer game genres are in thrall of film, while some of them emulate live action film and the others animated/cartoon film – and at more levels.[49] Also the game-like films per se, which were reflected above, could be objects of a more complex and far more thorough analysis and interpretation. The three particular films have a lot in common – all of them are, for instance, filled with action, all of them are vivid and noisy (sometimes literally, but mainly figuratively) and all of them captivate the senses of the viewer, although they are just in the position of anon-player. Interestingly and taking into consideration primarily that very nature of the films as such, one thing is important to accentuate: The viewer doesn't participate in them actively in terms of playerwise involvement, nevertheless, they surely do participate in them actively in terms of perception. And within the process of perception during which the aesthetic experience arises the intermedial interlinks also play a major role – and at more levels. After all, in those three cases (and others, of course, too) the viewer doesn't watch just a simple film, a simple intermedium, but a film fundamentally defined by what we here understand as the 'intermedia-presence' of digital games in cinema – i.e., one particular appearance of what we understand as cinematic 'intermedia[2]'.

A. Ndalianis writes in one of her considerations on digital games (symptomatically, also in connection with film) as follows: "The cross-over between popular culture forms such as films and computer games tests the clear separation between diverse media forms, and this overlap has ramification for genre analysis".[50] One definitely cannot argue with her. Nevertheless, within the frame of ramifications (not necessarily understood as negative) can arise something novel, something that – as it is the case of *Run Lola Run, Scott Pilgrim vs. the World, Hardcore Henry* and also many other films and not only those mentioned above – gives the opportunity not only to check out but also productively overcome the borders as well as the very limits of the interlinked media (or) forms. And – as we actually can experience it in connection with culture and its contents including, of course, film and digital games, so to speak, on a daily basis – exactly around the borderlines happens what's worth the (aesthetic) attention the most.

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49   STALLABRAS, J.: Jen si hrát. In *Biograph. Magazín pro film a nova média*, 1998, Vol. 6, No. 1, p. 45.
50   NDALIANIS, A.: The Rules of the Game: Evil Dead II... Meet Thy Doom. In JENKINS, H., McPHERSON, T., SHATTUC, J. (eds.): *Hop on Pop: The Politics and Pleasures of Popular Culture*. Durham, London : Duke University Press, 2002, p. 503.

BIBLIOGRAPHY

BALÁŽ, M., DRŽIAK, N.: *True* Štúr. 2015. [online]. [2020-03-14]. Available at <https://www.rtvs.sk/televizia/archiv/9578/78439>.

BARTKOWIAK, A. (Director): *Doom (2005)*. [DVD]. Los Angeles : Universal, 2006.

BEIL, B.: *First Person Perspectives. Point of View und figurenzentrierte Erzählformen im Film und im Computerspiel.* Münster : Lit Verlag, 2010.

BESSON, L. (Director): *Léon – The Professional (1994, Uncut International Version).* [DVD]. Culver City : Sony Pictures, 2000.

BOSZORÁD, M.: *Film ako „intermédium" na druhú.* Paper presented at XIX. Czech and Slovak Filmologic Conference with the theme Obraz – slovo – zvuk. Krpáčovo, presented on 19th October 2019.

DEUTSCH, G. (Director): *Shirley: Visions of Reality (2013, Dual Format Edition).* [Blu-ray & DVD]. London : Eureka Entertainment, 2018.

EVANS, G. (Director): *The Raid: Redemption (2011).* [DVD]. Culver City : Sony Pictures, 2012.

FORSTER, M. (Director): *Stranger than Fiction (2006).* [DVD]. Culver City : Sony Pictures, 2007.

GREENAWAY, P. (Director): *Prospero's Books (1991).* [DVD]. New York : Allied Artists, 2016.

CHAZELLE, D. (Director): *La La Land (2016).* [DVD]. Santa Monica : Summit Entertainment, 2017.

KOBIELA, D., WELCHMAN, H. (Directors): *Loving Vincent (2017).* [DVD]. London : Altitude FIlm, 2018.

KOŘENSKÝ, J.: Intermedialita – intertextualita – multitextualita – hypertextualita?. In SCHNEIDER, J., KRAUSOVÁ, L. (eds.): *Intermedialita: slovo – obraz – zvuk. Sborník příspěvků ze sympozia*. Olomouc : Univerzita Palackého, 2008, p. 9-11.

KUDLÁČ, M.: Transmedia Storytelling: The Many Faces of Video Games, Fluid Narratives and Winding Seriality. In CALLAHAN, D., BARKER, A. (eds.): *Body and Text: Cultural Transformations in New Media Environments*. Cham : Springer, 2019, p. 191-203.

LEE, A. (Director): *Hulk (2003).* [DVD]. Los Angeles : Universal, 2003.

LISBERGER, S. (Director): *Tron (1982).* [DVD]. Burbank : Disney, 2002.

LUHRMANN, B. (Director): *Moulin Rouge (2001).* [DVD]. Los Angeles : 20th Century Studios, 2001.

MALÍČEK, J.: Videohra – výrazový prostriedok populárnej kultúry v postmodernej situácii. In PLESNÍK, Ľ., ŽILKOVÁ, M. (eds.): *O interpretácii umeleckého textu 23. Pragmatika vyjadrovacích prostriedkov umenia.* Nitra : UKF in Nitra, 2001, p. 121-129.

NAISHULLER, I. (Director): *Hardcore Henry (2015).* [DVD]. Burbank : STX Entertainment, 2016.

NDALIANIS, A.: The Rules of the Game: Evil Dead II... Meet Thy Doom. In JENKINS, H., McPHERSON, T., SHATTUC, J. (eds.): *Hop on Pop: The Politics and Pleasures of Popular Culture.* Durham, London : Duke University Press, 2002, p. 503-516.

MIDWAY et al.: *Mortal Kombat (series).* [digital game]. Chicago : Midway, 1992-2019.

NEVELDINE, M., TAYLOR, B. (Directors): *Crank (2006).* [DVD]. Santa Monica : Lionsgate, 2007.

NINTENDO et al.: *The Legends of Zelda (series).* [digital game]. Kyoto : Nintendo, 1986-2019.

PAECH, J.: The Intermediality of Film. In *Acta Universitatis Sapientiae, Film and Media Studies*, 2011, Vol. 4, No. 1, p. 7-21. ISSN 2066-7779. [online]. [2020-03-14]. Available at: <http://www.acta.sapientia.ro/acta-film/C4/Film4-1.pdf>.

PETHÖ, Á.: Approaches to Studying Intermediality in Contemporary Cinema. In *Acta Universitatis Sapientiae, Film and Media Studies*, 2018, Vol. 15, No. 1, p. 165-187. ISSN 2066-7779. [online]. [2020-03-14]. Available at: <http://www.acta.sapientia.ro/acta-film/C15/film15-09.pdf>.

PETHÖ, Á.: Intermediality in Film: A Historiography of Methodologies. In *Acta Universitatis Sapientiae, Film and Media Studies*, 2010, Vol. 2, No. 1, p. 39-72. ISSN 2066-7779. [online]. [2020-03-14]. Available at: <http://www.acta.sapientia.ro/acta-film/C2/film2-3.pdf>.

QUEEN: *Don't stop me know. Track No. 12 on the Studio Album Jazz by Queen.* [CD]. London : EMI Records Limited, 1979.

ROCKSTAR NORTH et al.: *Grand Theft Auto (series).* [digital game]. New York : Rockstar Games, 1997-2013.

SCHNEIDER, J.: Intermedialita: Malá vstupní inventura. In SCHNEIDER, J., KRAUSOVÁ, L. (eds.): *Vybrané kapitoly* z intermediality. Olomouc : Univerzita Palackého, 2008, p. 5-15.

SHUSTERMAN, R.: *Pragmatist Aesthetics: Living Beauty, Rethinking Art.* Oxford : Blackwell, 1992.

SIMONIS, A.: *Intermediales Spiel im Film. Ästhetische Erfahrung zwischen Schrift, Bild und Musik.* Bielefeld : transcript Verlag, 2010.

SIMONSSON, O., NILSSON, J. S. (Directors): *Sound of Noise (2010).* [DVD]. New York : Magnolia Pictures, 2012.

SNYDER, Z. (Director): *Sucker Punch (2011).* [DVD]. Burbank : Warner Bros., 2011.

SPIELBERG, S. (Director): *Ready Player One (2018).* [DVD]. Burbank : Warner Bros., 2018.

STALLABRAS, J: Jen si hrát. In *Biograph. Magazín pro film a nova média*, 1998, Vol. 6, No. 1, p. 44-55. ISSN N/A.

STOPEL, B.: On Botched Cinematic Transformations of Video Games. In CALLAHAN, D., BARKER, A. (eds.): *Body and Text: Cultural Transformations in New Media Environments.* Cham : Springer, 2019, p. 173-190.

SZCZEPANIK, P.: Intermedialita. In *Cinepur*, 2002, Vol. 9, No. 22. ISSN 1213-516X. [online]. [2020-03-14]. Available at: <http://cinepur.cz/article.php?article=5>.

ŠVELCH, J.: Co nám říká hra. Teoretické a metodologické přístupy k počítačové hře jako expresivnímu médiu. In *Iluminace: Časopis pro teorii, historii* a *estetiku filmu*, 2012, Vol. 24, No. 2, p. 33-48. ISSN 0862-397X.

ŠVELCH, J.: Počítačové hry jako nová média. In *Mediální studia*, 2008, Vol. 3, No. 1, p. 8-35. ISSN 2464-4846. [online]. [2020-03-14]. Available at: <https://medialnistudia.fsv.cuni.cz/front.file/download?file=2008_01_01_svelch.pdf>.

TYKWER, T. (Director): *Run Lola Run (1998).* [DVD]. Culver City : Sony Pictures, 1999.

UBISOFT: *Scott Pilgrim vs. the World: The Game.* [digital game]. Montreal : Ubisoft, 2010.

WINTER, A.: Intermedialita a synestezie. In SCHNEIDER, J., KRAUSOVÁ, L. (eds.): *Intermedialita: slovo – obraz – zvuk*. Olomouc : Univerzita Palackého, 2008, p. 27-43.

WRIGHT, E. (Director): *Scott Pilgrim vs. the World*. [DVD]. Los Angeles : Universal, 2010.

'Is This a Joke?': The Delivery of Serious Content through Satirical Digital Games

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ABSTRACT:
Games that utilize satire have largely been unexplored despite their potential to be used as learning supplements or tools to foster conversations around difficult large-scale topics. To what game genre do these games belong, and what are the uses and benefits for learning from such games? In this exploration study, we examine six popular and culturally relevant digital games (5 directly, 1 indirectly) utilizing satire as part of their narrative and gameplay. The range of games covers topics such as global overpopulation, the use of artificial intelligence for surveillance, and the process of mass capitalist production and the manner of its consumption. Satirical digital games serve both the purposes of serious games and entertainment games, pointing to the problematic connotations of the term *serious games*. It is suggested that the name *satirical games* is used to describe digital games created for entertainment with underlying political messages and to make a statement and/or commentary on society. Satirical games have potential as powerful learning tools to help facilitate discussion around difficult topics about society's functions and practices. Future studies should examine additional digital game titles that rely on satire in their narrative and gameplay and investigate the relationship between satire and its role in the learning goals of the games.

KEY WORDS:
digital games, game-based learning, informal learning, satire, serious games.

Introduction

In 2011, a digital game by the name of *Phone Story*[1] was banned from the Apple store. The gameplay involved taking on different roles, but mostly entailed the supervision and management of manual labourers as they gather resource, assemble, and sell smartphone devices. A spokesman for Apple stated, "We removed the app because it violates our developer guidelines" and declined to elaborate.[2] There were no comments regarding the politically charged design or its critique of smartphone manufacturing practices, such as the factory facility manager's responsibility to prevent suicides among assembly line workers. What is the genre of digital games like Phone Story that utilize satire as part of their narrative and gameplay? What are the uses and benefits for learning from digital games that operate with satire? Serious game is a term that is still being contested today and which has been defined in a multitude of ways. The term 'serious games' has been critiqued for being limited in scope and difficult to translate across disciplines. One proposed definition refers to serious games as "Entertainment Games with Non-Entertainment Goals," while others counter with the idea that serious games prioritize education rather than entertainment. Another definition is that serious games serve purposes while experimental games are at the opposite end of the spectrum with minimal to no gaming

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1　　MOLLEINDUSTRIA: *Phone Story.* [digital game]. Pittsburgh : Molleindustria, 2011.
2　　WORTHAM, J.: *Game that critiques Apple vanishes from app store.* Released on 13th September 2011. [online] [2020-03-18]. Available at: <https://bits.blogs.nytimes.com/2011/09/13/game-that-critiques-apple-vanishes-from-app-store/>.

characteristics for purpose.[3] The commonality of these definitions is the differentiation and identification of the creator intent behind the game, a question of whether or not the game serves the player beyond the purpose of entertainment. These authors deliberately use 'serious' as a term associated with education and learning. However, does learning always have to be considered a 'serious' affair? Is there no value for learning beyond entertainment for games labelled outside 'serious'? There have already been arguments to change the term altogether from serious games to the more general term of applied games.[4] In this paper, we argue that games created for entertainment can be used for teaching and learning regardless of the game's initial intent through the genre of proposed *satirical games*. Our intent is not to replace 'serious games' with 'satirical games,' but to illustrate that the characteristics of serious games (e.g., the educational aspects) can be applied to games made for entertainment, with an emphasis on the use of satire. We desire to build a theoretical background to the use of games made for entertainment for learning to motivate the development of further research on this topic.

In the words of William Shakespeare, "There is nothing good or bad, but thinking makes it so".[5] Humour can be an effective tool to learn and experiment with values, push boundaries, and create meaningful experiences. Satire utilizes humour, irony, exaggeration, and ridicule to highlight and criticizes human actions and behaviours, particularly in politics and topical issues.[6] Satire can be as much a cultural commentary or statement as it is a technological product. Initial research has shown that game developers who contribute to building a game with a political message enhance their everyday political engagement, impact their knowledge and opinions on the political issue(s), and construct the idea of a 'political self' through the act of play.[7] This work also builds on I. Bogost's idea of anti-*advergames*, or games that were created to criticize a company rather than support it,[8] and G. Ferri's initial work on the examination of digital storytelling of political, satirical, and propagandistic discourses in digital games.[9] Discussions around satirical games have potential to spark interest in the inequal access to technologies, the financial power necessary to obtain and sustain such technologies (even actions such as micro-purchases), and the product inclination to appropriated narratives.[10] While the label of satirical games was used in the past, there has been a lack of a clear, generalizable definition and arguments advocating the genre. Satirical games are unique in that the genre straddles the fence between serious games and digital games designed for entertainment. We suggest the name of *satirical games* for digital games that utilize satire to entertain an audience with underlying political messages and/or commentary on the functions of society. These messages can be hidden and subtle but serve as critical proponents to the game objective and narrative. Satirical games are a genre that has vast potential to grow on the market and as a tool for learning, ultimately both enlightening and educating the public masses on critical issues in society.

3   MARSH, T.: Serious games continuum: Between games for purpose and experiential environments for purpose. In *Entertainment Computing*, 2011, Vol. 2, No. 2, p. 62-63.; MICHAEL, D. R., CHEN, S. L.: *Serious games: Game that educate, train, and inform*. Mason : Course Technology PTR, 2005, p. 3-44.; JOHANNES, B., BENTE, G.: Why so serious? On the relation of serious games and learning. In *Eludamos: Journal for Computer Game Culture*, 2010, Vol. 4, No. 1, p. 9-21.
4   SCHMIDT, R., EMMERICH, K., SCHMIDT, B.: Applied Games – In Search of a New Definition. In CHORIANOPOULOS, K., DIVITINI, M., BAALSRUD, H. J., JACCHERI, L., MALAKA, R. (eds.): *Proceedings of International Conference on Entertainment Computing*. Tronheim : Springer, 2015, p. 105-109.
5   SHAKESPEARE, W.: *Hamlet*. New York : Simon and Schuster, 2003, p. 99.
6   *Satire*. [online]. [2020-03-18]. Available at: <https://www.lexico.com/en/definition/satire>.
7   NEYS, J., JANSZ, J.: Political interest games: Engaging an audience. In *European Journal of Communication*, 2010, Vol. 25, No. 3, p. 228-230.
8   BOGOST, I.: *Persuasive games: The expressive power of videogames*. Cambridge : The MIT Press, 2007, p. 29-30.
9   FERRI, G.: Satire, Propaganda, Play, Storytelling. In KOENITZ, H. et al.: *Proceedings of International Conference on Interactive Digital Storytelling*. Istanbul : Springer, 2013, p. 174-175.
10   WALTON, M., PALLITT, N.: 'Grand theft South Africa': Games, literacy, and inequality in consumer childhoods. In *Language and Education*, 2012, Vol. 26, No. 4, p. 357.

Methodology

This exploratory study aims to provide more insight about digital games that utilize satire and their potential for teaching and learning. The first research goal is to examine digital games that utilize satire in their narrative and gameplay. Satire as a literal device has seldom been examined within digital environments. The most recent work we located was conducted by G. Ferri in 2013, who examined *Oiligarchy*[11] (a flash-based game) and Phone Story (a mobile game) from a critical lens of 'ludic satire', or possessing the elements of being ludic within satire. Ferri proposed that games such as Oiligarchy and Phone Story, which were both developed by one company, amount to more than just 'gamified' political statements. He argued that these games that utilize satire illustrate the potential in the overlap between "simulation, playful elements and rhetorical persuasion".[12] We want to examine satrical games beyond the scope of one developer, and to better understand the landscape of games that effectively use satire and are accessible to the public we propose:

- RQ1: What are the existing digital games that utilize satire and what is the dominant game genre?

To our knowledge, there have been no attempts to examine a multitude of games relying on satire thus far, and it is our endeavour to contribute to literature examining digital games, learning, and the role and impact of satire within those spaces. The second research goal focuses on the use and benefits for learning from digital games that heavily rely on satire in their narrative and gameplay in both formal and informal learning settings:

- RQ2: What are the learning benefits from digital games that rely on satire in their narrative and gameplay?

Ferri questioned the meaning of the player's participation in the proposed satire, the consequence of leading players to an undesirable state, and whether the target of ludic satire would be the simulated system or, to some capacity, the player.[13] While we cannot answer all of his questions in this theoretical paper, our effort to capture the potential learning benefits of satirical games examines the player's role, the storyline of popular satirical games, and some of the potential learning opportunities and outcomes that stem from this experience. We suspect there are learning benefits from satirical games based on the nature of satire. D. H. Griffin, a professor emeritus of English, described the design of satire as an attack on vice or folly through wit or ridicule.[14] P. Fabbri, a semiotician, argued that satire's effect relies on evoking strong emotions, and that satirists usually channel their indignation or anger through humour to embarrass or shame the intended target.[15] We investigate how these critical messages are presented in digital games and also their general reception by the public. We approach the data using qualitative content analysis for the purpose of identifying themes and patterns to provide knowledge and understanding about what is being studied.[16] Though qualitative content analysis is traditionally thought of as analyzing text, we believe that the approach is fitting for digital games as well, as the selected digital games all rely on text for narrative and satire.

11   MOLLEINDUSTRIA: *Oiligarchy*. [digital game]. Pittsburgh : Molleindustria, 2008.
12   FERRI, G.: Rhetorics, Simulations and Games: The Ludic and Satirical Discourse of Molleindustria. In *International Journal of Gaming and Computer-Mediated Simulations*, 2013, Vol. 5, No. 1, p. 37.
13   Ibidem, p. 47.
14   GRIFFIN, D. H.: *Satire: A Critical Reintroduction*. Lexington : The University Press of Kentucky, 1994, p. 1.
15   FABBRI, P.: *Satira*. [online]. [2020-05-20]. Available at: <https://www.alfabeta2.it/2012/06/13/satira/>.
16   HSIEN, H. F., SHANNON, S. E.: Three approaches to qualitative content analysis. In *Qualitative Health Research*, 2005, Vol. 15, No. 9, p. 1278-1279.

Games can be defined as a form of text[17] and categorized for content analysis. We were most interested in who wrote these texts (developers) and the game genre, their popularity (number of players) and accessibility (platform), the game's general reception (consumer rating, number of reviews), and how players perceived game content (frequently used user-generated tags). The terms 'satire', 'satire games', and 'satirical games' were searched on Steam, a popular game portal for PC and Mac downloads.

Analysis

Pay A Better Life describes their own game as " a serious game about AI, PRISM, big data, privacy, and free speech" and addresses how data is collected, analyzed, and its impact on consumers. The title of *Big Brother Is Shaping You*[18] fittingly references George Orwell's *1984*[19], a political satire about a totalitarian state where the government's surveillance reach extends to listening devices and cameras, and where Big Brother is the head of the regime. The plot in Big Brother Is Shaping You takes place in a ficticious dystopian world, where user data from all online platforms is handed to the National Survelliance Agency using artificial intelligence. The player takes the role of a worker who interacts with his daily platforms of virtual networks and focuses on issues of information filtering, algorithms, and data tracking that suppress the protagonist. The American visual novel *Doki Doki Literature Club!*[20] emulates the traditional format of a Japanese single-player visual novel, akin to a choose-your-own novel (think *Black Mirror: Bandersnatch*[21]). The player takes the role of the male protagonist, who is typically presented with an array of eligible bachelorettes, and then tasked with pursuing her as the sole romantic interest by selecting a series of actions throughout the narrative that eventually lead to one of multiple endings. The plot turns awry when the protagonists discovers one of the bachelorettes, having admitted to the protagonist that she struggles with depression, has hung herself at home. The player is then sent back to the game's main menu with all previous save files erased. Ultimately the player discovers that one of the characters, Monika, has become self-aware of her situation as a videogame character. She declares her love to the player directly and not the protagonist of the game, and sabotages other characters to make herself the most appealing romantic candidate to the player. Scenes from this narrative invoke feelings of horror and uncertainty that are not found in traditional visual novel formats (Picture 1).

Human Resource Machine[22] is a 40-level puzzle game that pivots the player as an office worker who must complete tasks to keep his or her job from robot replacements, all the while being monitored by a superior. The office space has three components that resemble assembly language: simple instructions on each task that are like opcodes, the player holding items sprawled across the floor like a processor register, and the spaces on the office floor are akin to main memory. Human Resource Machine educates the player on a graduate scale, starting with basic programming concepts like loops and jumps, then on to more advanced topics such as memory addresses. The player's superior offers hints on how to complete the puzzle, and at the end of each level the player is shown the

average time that it took other players to complete the puzzle. Gameplay is intermitted by cutscenes showing that the city where the story takes place is under attack by robots, who slowly begin to replace other workers with robots.

Picture 1: Screenshots from Doki Doki Literature Club! that emulates traditional romance visual novels (left), and showing the self-aware character Monika 'hacking' the game files to tarnish the chances of other eligible bachelorettes (right)

Source: Doki Doki Literature Club!. [online]. [2020-03-22]. Available at: <https://store.steampowered.com/app/698780/ Doki_Doki_Literature_Club/>.; JACKSON, G.: Doki Doki Literature Club Scared Me Shitless. Released on 1st October 2017. [online]. [2020-03-22]. Available at: <https://kotaku.com/doki-doki-literature-club-scared-me-shitless-1819361548>.

Phone Story is a product of Molleindustria, an independent game developer who are direct in their use of satire in game products. The following passage follows the definition of 'molleindustria' as a project of appropriation of digital games and a call for the radicalization of popular culture: "Since 2003 we produced artisanal remedies to the idiocy of mainstream entertainment in the form of free, short-form, online games. Our products range from satirical business simulations (McDonald's Video game, Oiligarchy) to medications on labour and alienation (Every day the same dream, Tuboflex, Unmanned), from playable theories (the Free Culture Game, Leaky World) to politically incorrect pseudo-games (Orgasm Simulator, Operation: Pedopriest)".[23] The goal of Phone Story is to show the life cycle of smartphones from their creation to their disposal. A narrator's voice plays over each minigame to explain what is happening in the scene and presents reasons for the player to care. The game features four minigames: mining in the Democratic Republic of the Congo where the player must control guards to ensure labourers do not rest; moving back and forth to catch leaping workers from a factory to prevent suicide; slinging phones into the hands of customers at a phone store; and lastly, breaking down old phones and splitting them among Ghanaian workers and salvaged in unsafe ways.

7 Billion Humans[24] is a 60-level puzzle game developed by the same company that produced Human Resource Machine, available in eleven languages, and presents similar dystopian themes. The story posits that robots have replaced humans in all areas of work and people are then free to pursue whatever interests they want. However, the people demand well-paying jobs, thus prompting a machine to create jobs for all seven billion people in a towering office building that is visible from outer space. Even those with 'useless skills', such as doctorates in medieval history, can be put to work. Human Resource Machine focuses on assembly language and one single office worker, whereas 7 Billion Humans focuses on parallel processing language represented by swarms of office workers. In cases where the player fails to solve the puzzle, office workers willingly jump into shredders or explode where they stand as the nearby superior angrily says, 'All your workers have died!'.

17   AARSETH, E. J.: *Cybertext: Perspectives on ergodic literature*. Baltimore : John Hopkins University Press, 1997, p. 2-3; 95.
18   PABL: *Big Brother Is Shaping You*. [digital game]. China : Pabl, 2019.
19   For more information, see: ORWELL, G.: *1984*. San Diego : Harcourt Brace Jovanovich Publishers, 1977.
20   TEAM SALVATO: *Doki Doki Literature Club!*. [digital game]. New Jersey : Team Salvato, 2017.
21   SLADE, D. (Director): *Black Mirror: Bandersnatch*. [VOD]. Los Gatos : Netflix, 2018.
22   TOMORROW CORPORATION: *Human Resource Machine*. [digital game]. Chesterfield : Tomorrow Corporation, 2015.

23   *About Molleindustria*. [online]. [2020-03-18]. Available at: <https://www.molleindustria.org/blog/about/>.
24   TOMORROW CORPORATION: *7 Billion Humans*. [digital game]. Chesterfield : Tomorrow Corporation, 2018.

The player works for a company that owns *We Happy Restaurant*[25] and the goal is to make as much money as possible, which is a message reiterated throughout the course of the game. Consumable products include burgers made from radioactive material, sushi made out of floppy discs and USB's, and sundaes consisting of mercury. Unknowing customers can be 'persuaded' off the street by money to visit the player's restaurant, where they continue to consume food until they begin to mutate, and ultimately explode in a mess of green goo and leave behind a pile of money. The off-putting company representative, with noticeable scars on his wrists and his neck, pleasantly justifies the company's use of toxins, plastics, and other deceptive methods at every turn. Later stages of the game even include three hospital-like units across from the restaurant for behavioural correction (Picture 2). The purpose of this particular lot, including emergency care (e.g., scams proclaiming to heal any illness) and head massage (i.e., modify consumer memories), is to free customers of sickness and paranoia when it occurs and to enable customers to return to their cycle of consuming.
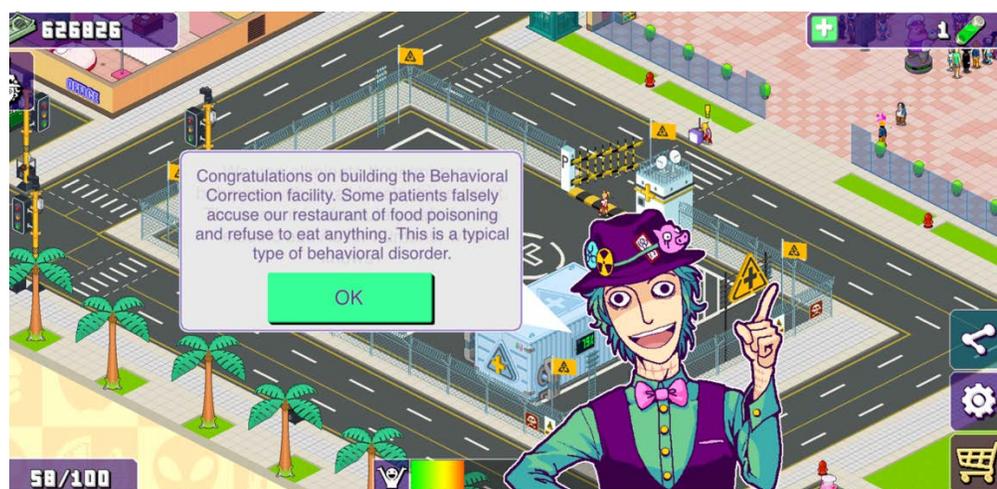
Picture 2: A We Happy Company representative explaining game mechanics
Source: author's screenshot; CHILLY ROOM: *We Happy Restaurant.* [digital game]. Guangdong : Shenzhen Shengxunda Technology Co., 2019.

Results

Six game titles created prior to December 2019 were found related to satire (Table 1). They were selected through a search for satricial games on Steam or for their existing reputation as controversial games. Mobile games Phone Story and We Happy Restaurant were added as they inspired this research. All titles were single-player games created by independent developers, and these games received mostly positive ratings from consumers. There was no consistent game genre across these titles, ranging from visual novel to simulation.

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25   CHILLY ROOM: *We Happy Restaurant.* [digital game]. Guangdong : Shenzhen Shengxunda Technology Co., 2019.

Table 1: A summary of games, which directly utilize satire as part of its game narrative and gameplay features and consumer reviews as of December 2019

Game title	Developer	Platform	Number of players	Consumer rating	Number of reviews	Popular user-defined tags on Steam
Big Brother Is Shaping You	Pay A Better Life	Windows	Single-player	87% positive on Steam	456	Indie, satire, dystopian, dark humour
Doki Doki Literature Club!*	Team Salvato	Windows, Mac OS X	Single-player	96% positive on Steam	120,367	Psychological horror, anime, visual novel, horror
Human Resource Machine	Tomorrow Coporation	Windows, Mac OS X, Steam OS + Linux	Single-player	94% positive on Steam	1,553	Programming, puzzle, indie, casual, simulation
Phone Story	Molleindustria	Android, iOS (banned)	Single-player	3.7/5 (74%) on Google Play	576	N/A
7 Billion Humans	Tomorrow Corporation	Windows, Mac OS X, Steam OS + Linux	Single-player	95% positive on Steam	598	Programming, indie, puzzle, simulation, logic
We Happy Restaurant	ChillyRoom	Android, iOS	Single-player	4.2/5 (84%) on Google Play	18,644	N/A

* indirectly related to satire
Source: own processing

Discussion

Satirical games can address societal, political, and cultural issues with tact and humour. There is potential for satirical games to be used as tools to facilitate discussions around perfectionism, consumerism, capitalism, overpopulation, and more both in classrooms and at home. Digital games can be powerful learning tools on both the individual and communal level. First, immersion is one of the main motivational factors for digital gameplay.[26] Digital games offer experiences for players to participate in roles and activities otherwise unavailable to them (e.g., managing a restaurant, dating multiple people at once). Once an individual is immersed in the digital game experience, there is

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26   SHERRY, J. L., GREENBERG, B. S., LUCAS, K., LACHLAN, K. A.: Video game uses and gratifications as predictors of use and game preferences. In *Playing Video Games: Motives, Responses, and Consequences*, 2006, Vol. 24, No. 1, p. 217-218.; QUICK, J. M., ATKINSON, R. K.: A data-driven taxonomy of undergraduate student videogame enjoyment. In STEINKUEHLER, C., CRYSTLE, M. (eds): *Proceedings of the 7th International Conference on Games + Learning + Society Conference*. Pittsburgh : ETC Press, 2011, p. 185.; YEE, N.: Motivations of play in MMORPGS. In DE CASTELL, S., JENSON, J. (eds.): *Proceedings of DiGRA 2005 Conference – Changing Views: Worlds in Play*. Vancouver : Digital Games Research Association, 2005, p. 773-774..

the likelihood of entering a flow state,[27] which is marked by characteristics of intense concentration, merging of action and awareness, loss of self-consciousness and the passing of time, and perceiving the activity as intrinsically rewarding. While all the games in this study are single-player, those who have played the game can collectively assess their individual experiences and create a shared experience through peer-to-peer dialogue. Peer interactions can help facilitate learning[28] and can lead to the development of interest in the digital game's domain.[29] Evidence of the existing relationship between single-player games and a larger community of fans can be found in the organic development of fan-made and fanmaintained content shared online (e.g., fanart[30], fanfiction[31], websites[32]) organized by dedicated communities. Researchers have referred to these activities within youth as "geeking out," in which participants hold meaningful roles, are interest-driven, and develop areas of expertise within communities around shared interests.[33]

The digital games that exist and are discussed in this article seem to be well-received for both their narrative and gameplay. The range of satirical game genres speaks to the flexibility of the videogame medium and how satire can manifest itself in a narrative in multiple, differientiating ways. Phone Story received the lowest rating with consumers highlighting that the game itself is too short or too repetitive despite appreciation for the political message of the game. Consumers expressed that the value of the game and gameplay did not match its monetary value of 1.99 USD and others added that the game needed an update to run properly on newer smartphones.[34] Molleindustria digital games place the political message of the game at the forefront (i.e., in the game title or direct voiceover narrative explaining the political message), whereas other companies like Tomorrow Corporation artfully incorporate the message into the gameplay and overarching narrative. For example, Human Resource Machine and 7 Billion Humans both focus on learning a programming language. The umbrella for both these stories is automatization, calling to the rising need for STEM workers in America and the need to understand programming language, including which jobs are considered "useless skills" and what is being valued in American society. The digital games also make a commentary on large corporations' use of robots to free workers of mundane labour so that they may pursue their passions, but those who were now jobless demand well-paying jobs to survive. The solution comes from machines who create low-level entry jobs for everyone in the world, and in this scenario human beings literally become the cogs in the wheel of a big machine, becoming easily dispensable, replaceable, and their lives have little to no value. It then raises questions on the effects of capitalism and large corporatization on the well-being of the people, and these reflections do not need to rely on an upfront narrative explanation as in Phone Story.

The use of satirical games for learning can draw our attention to phenomena often overlooked. Doki Doki Literature Club! added an element of horror to dating visual novels by adding a consciousness to one of the 2D videogame characters. The usual control that the player has in these digital games is stripped away; the player is forced to evaluate the fantasy relationships with these perfectly crafted personalities designed to fall in love with the player and accept his or her advances, inevitably face the loss of control over the plot, and continue with the unpredictability and horror that ensues from the events that occur. The digital game has the potential to disrupt the lifestyle of a *hikikomori*,[35] someone who chooses to socially withdraw for extended durations and who is often overlooked or looked down upon in Japanese society, and possibly inspire positive change as the player reflects on the status of their own relationships. Doki Doki Literature Club! may also serve as a supplementary learning tool in a curriculum for mental health, identifying patterns and signs of mental instability, depression, and abusive and controlling behaviours in romantic relationships. Satirical games allow for dystopian or exaggerated versions of the future if we continue down the same path of unawareness. They can portray the helpless state of consumers in the food industry, a world where people have no power over the government or corporations (sometimes forced to work for the corporations themselves to survive), and no matter where people turn, there is no escape from predestination. These visions can be upsetting and terrifying, but also humourous, and the possibility of their reality is much closer than we would like to think if the public remains unaware of how their strings are being drawn. Overall, the satirical digital games in this article forewarn players of being puppets for larger, uncontrollable entities that have their own priorities first and do not have the player's well-being in mind. In turn, these digital games can serve as a shared experience for learning the functions of society and its critiques and serve to illustrate the consequences of our collective actions and passivity, as well as the impact of governing policies. Our definition of satirical games elaborates on Bogost's proposed term of *anti-advergames*[36] by not limiting the scope only to companies, but rather societal practices and infrastructures at large.

Lastly, we believe categories and genres are necessary to distinguish the nuances that exist between game titles. However, we remain unconvinced that 'serious' is the best term to describe digital games with learning goals within target content, and 'educational' digital games have a history of disengagement from younger audiences and low excitement.[37] The term 'serious games' presents several problems when received by those outside the gaming community and by the public: it assumes that digital games made for entertainment do not involve learning goals and undermines their effective and established design for learning, it creates an unnecessary dichotomy between game titles, and posits conflict between the factions in favour or not in favor of serious games. The near antonym of 'serious' in the dictionary is riddled with words like 'comical,' 'light,' 'ridiculous,' and 'absurd'.[38] The definition of 'serious' contributes to the misguided division of play from learning and contributes to the common belief that digital game play is an unproductive use of time and impairs our youth's development.[39] However, it is likely from the current

27 NAKAMURA, J., CSIKSZENTMIHALYI, M.: The concept of flow. In CSIKSZENTMIHALYI, M. (ed.): *Flow and the Foundations of Positive Psychology*. London, New York : Springer, 2014, p. 240.
28 PLASS, J. L., O'KEEFE, P. A., HOMER, B. D., CASE, J., HAYWARD, E. O., STEIN, M., PERLIN, K.: The impact of individual, competitive, and collaborative mathematics game play on learning, performance, and motivation. In *Journal of Educational Psychology*, 2013, Vol. 105, No. 4, p. 1059.
29 ROSAS, R. et al.: Beyond Nintendo: Design and assessment of educational video games for first and second grade students. In *Computers & Education*, 2003, Vol. 40, No. 1, p. 89-90.
30 *We Happy Restaurant tagged posts*. [online]. [2020-05-17]. Available at: <https://www.tumblr.com/tagged/we-happy-restaurant>.
31 *The human resource machine*. [online]. [2020-04-15]. Available at: <https://www.fanfiction.net/s/13553612/1/The-Human-Resource-Machine>.
32 *Doki Doki Literature Club! Wiki*. [online]. [2020-05-17]. Available at: <https://doki-doki-literature-club.fandom.com/wiki/Doki_Doki_Literature_Club_Wiki>.
33 ITO, M.: *Hanging out, messing around, and geeking out*. Cambridge : The MIT Press, 2013, p. 65-66.
34 *Google Play: Com-Phone Story Maker*. [online]. [2020-03-18]. Available at: <https://play.google.com/store/apps/details?id=ac.robinson.mediaphone&hl=sk>.

35 FURLONG, A.: The Japanese hikikomori phenomenon: acute social withdrawal among young people. In *The Sociological Review*, 2008, Vol. 56, No. 2, p. 309.
36 BOGOST, I.: *Persuasive games: The expressive power of videogames*. Cambridge : The MIT Press, 2007, p. 223-230.
37 GROS, B.: Digital games in education: The design of game-based learning environments. In *Journal of Research on Technology in Education*, 2007, Vol. 40, No. 1, p. 25-26.; JENKINS, B.: Don't quit playing: Video games in the STEM classroom. In *Techniques: Connecting Education & Careers*, 2014, Vol. 89, No. 1, p. 60.
38 *Serious*. [online]. [2020-03-18]. Available at: <https://www.lexico.com/en/definition/serious>.
39 BOGOST, I.: The rhetoric of video games. In SALEN, K. (ed.): *The Ecology of Games: Connecting Youth, Games, and Learning*. Cambridge : The MIT Press, 2007, p. 120-121.

trends within education literature that the term serious games will remain popular as a form to distinguish between a game meant for learning and a game meant for entertainment. Rather than abandon the term 'serious games' altogether, those who choose to use 'serious games' should stay aware of the debate around the term, consider the necessity of distinguishing digital games (e.g., how is the game genre relevant to research goals?), and tread cautiously as we continue the dialogue around the need and the development of 'game literacy'.[40] Researchers, practitioners, and game developers should continue to foster dialogue across disciplines and collaborate more with each other on game projects. We must work towards a consensus on the meaning of 'serious games' and perhaps replace the term altogether to avoid further confusion (especially in multidisciplinary teams and conversations), and towards more fruitful collaborations that focus on meaningful learning rather than on how to market digital games. We consider that game utilization itself may be within the parameters of serious games even without the label 'serious'.

Conclusion

We contributed to the theoretical foundations of games that utilize satire by assessing such games that are available on Steam in addition to two mobile games that inspired the research, summarized their characteristics, and hypothesized on the future use of such games in learning. We proposed such games be referred to as satrical games, a genre of its own that critiques real-world problems and situations that can be as much a political statement as an interactive game experience. Satirical games allow for creative and political expression about *culturally relevant, time-sensitive topics* through the act of play. It is through exploration and play that we are led to question the manner in which we live, reflect on our roles and participation in society, and have our attention drawn to our relation to others. It is no coincidence that satirical games are being produced by indie game companies. Large established entities, such as EA Entertainment or Blizzard Entertainment may want to stay as politically neutral as possible. One misuse of satire may result in losing millions of dollars in revenue for large companies, not to diminish the financial pressures of indie companies, but there is a vast difference in pressure on reputation and consumer expectations where indie companies have more leeway to express unconventional ideas. The genre of satirical games and digital games in general should be taken more seriously by practitioners and researchers as tools for learning, and as a media receive the same level of critiques as film, television, and music. Arguably, digital games embody the theatrical and narrative aspects of film and television shows, utilizing music artfully, with the addition of free play through a crafted, hypothetical world. Future studies should examine additional digital game titles that were created for entertainment, or those traditionally considered 'non-serious' digital games and examine how satire is used to achieve learning goals within games. There is much potential for using satirical digital games for learning, such as utilizing one or more games mentioned in this study for additional empirical studies:

- What age group would benefit from the use of satirical games for learning?
- What is a method of introducing these games for learning purposes that would appeal to the appropriate audience in both formal and informal learning contexts?
- How well are these popular games received in an academic vs. home context?

- What are the learning gains from individual and shared play experiences, as well as follow-up discussions across different populations? It would be beneficial to run a study using experimental group design to isolate these variables.
- What are the best practices for follow-up discussions? How should follow-up discussions be structured and facilitated?

BIBLIOGRAPHY

About Molleindustria. [online]. [2020-03-18]. Available at: <https://www.molleindustria.org/blog/about/>.

AARSETH, E. J.: *Cybertext: Perspectives on ergodic literature*. Baltimore : John Hopkins University Press, 1997.

BOGOST, I.: *Persuasive games: The expressive power of videogames*. Cambridge : The MIT Press, 2007.

BOGOST, I.: The rhetoric of video games. In SALEN, K. (ed.): *The Ecology of Games: Connecting Youth, Games, and Learning*. Cambridge : The MIT Press, 2007, p. 117-139.

Doki Doki Literature Club!. [online]. [2020-03-22]. Available at: <https://store.steampowered.com/app/698780/Doki_Doki_Literature_Club/>.

Doki Doki Literature Club! Wiki. [online]. [2020-05-17]. Available at: <https://doki-doki-literature-club.fandom.com/wiki/Doki_Doki_Literature_Club_Wiki>.

FABBRI, P.: *Satira*. [online]. [2020-05-20]. Available at: <https://www.alfabeta2.it/2012/06/13/satira/>.

FERRI, G.: Rhetorics, simulations and games: The ludic and satirical discourse of molleindustria. In *International Journal of Gaming and Computer-Mediated Simulations*, 2013, Vol. 5, No. 1, p. 32-39. ISSN 1942-3888.

FERRI, G.: Satire, Propaganda, Play, Storytelling. In KOENITZ, H. et al.: *Proceedings of International Conference on Interactive Digital Storytelling*. Istanbul : Springer, 2013, p. 174-179.

FURLONG, A.: The Japanese hikikomori phenomenon: acute social withdrawal among young people. In *The Sociological Review*, 2008, Vol. 56, No. 2, p. 309-325. ISSN 0038-0261.

Google Play: Com-Phone Story Maker. [online]. [2020-03-18]. Available at: <https://play.google.com/store/apps/details?id=ac.robinson.mediaphone&hl=sk>.

GRIFFIN, D. H.: *Satire: A critical reintroduction*. Lexington : The University Press of Kentucky, 1994.

GROS, B.: Digital games in education: The design of game-based learning environments. In *Journal of Research on Technology in Education*, 2007, Vol. 40, No. 1, p. 23-38. ISSN 1945-0818.

HSIEN, H. F., SHANNON, S. E.: Three approaches to qualitative content analysis. In *Qualitative Health Research*, 2005, Vol. 15, No. 9, p. 1278-1279. ISSN 1049-7323.

CHILLY ROOM: *We Happy Restaurant*. [digital game]. Guangdong : Shenzhen Shengxunda Technology Co., 2019.

ITO, M.: *Hanging out, messing around, and geeking out*. Cambridge : The MIT Press, 2013.

JACKSON, G.: *Doki Doki Literature Club Scared Me Shitless*. Released on 1st October 2017. [online]. [2020-03-22]. Available at: <https://kotaku.com/doki-doki-literature-club-scared-me-shitless-1819361548>.

JENKINS, B.: Don't quit playing: Video games in the STEM classroom. In *Techniques: Connecting Education & Careers*, 2014, Vol. 89, No. 1, p. 60-61. ISSN 1527-1803.

JOHANNES, B., BENTE, G: Why so serious? On the relation of serious games and learning. In *Eludamos: Journal for Computer Game Culture*, 2010, Vol. 4, No. 1, p. 7-24. ISSN 1866-6124.

MARSH, T.: Serious games continuum: Between games for purpose and experiential environments for purpose. In *Entertainment Computing*, 2011, Vol. 2, No. 2, p. 61-68. ISSN 1875-9521.

MICHAEL, D. R., CHEN, S. L.: *Serious games: Games that educate, train, and inform*. Mason : Course Technology PTR, 2005.

---

40   WALTON, M., PALLITT, N.: 'Grand theft South Africa': Games, literacy, and inequality in consumer childhoods. In *Language and Education*, 2012, Vol. 26, No. 4, p. 347-357.

MOLLEINDUSTRIA: *Oiligarchy*. [digital game]. Pittsburgh : Molleindustria, 2008.

MOLLEINDUSTRIA: *Phone Story*. [digital game]. Pittsburgh : Molleindustria, 2011.

NAKAMURA, J., CSIKSZENTMIHALYI, M.: The concept of flow. In CSIKSZENTMIHALYI, M. (ed.): *Flow and the Foundations of Positive Psychology*. London, New York : Springer, 2014, p. 239-263.

NEYS, J., JANSZ, J.: Political interest games: Engaging an audience. In *European Journal of Communication*, 2010, Vol. 25., No. 3, p. 227-241. ISSN 0267-3231.

ORWELL, G.: *1984*. San Diego : Harcourt Brace Jovanovich Publishers, 1977.

PABL: *Big Brother Is Shaping You*. [digital game]. China : Pabl, 2019.

PLASS, J. L., O'KEEFE, P. A., HOMER, B. D., CASE, J., HAYWARD, E. O., STEIN, M., PERLIN, K.: The impact of individual, competitive, and collaborative mathematics game play on learning, performance, and motivation. In *Journal of Educational Psychology*, 2013, Vol. 105, No. 4, p. 1050-1066. ISSN 0022-0663.

QUICK, J. M., ATKINSON, R. K.: A data-driven taxonomy of undergraduate student videogame enjoyment. In STEINKUEHLER, C., CRYSTLE, M. (eds): *Proceedings of the 7th International Conference on Games + Learning + Society Conference*. Pittsburgh : ETC Press, 2011, p. 185-190.

ROSAS, R. et al.: Beyond Nintendo: Design and assessment of educational video games for first and second grade students. In *Computers & Education*, 2003, Vol. 40, No. 1, p. 71-94. ISSN 0360-1315.

Satire. [online]. [2020-03-18]. Available at: <https://www.lexico.com/en/definition/satire>.

Serious. [online]. [2020-03-18]. Available at: <https://www.lexico.com/en/definition/serious>.

SHAKESPEARE, W.: *Hamlet*. New York : Simon and Schuster, 2003, p. 1-272.

SHERRY, J. L., GREENBERG, B. S., LUCAS, K., LACHLAN, K. A.: Video game uses and gratifications as redictors of use and game preferences. In *International Journal of Sports Marketing and Sponsorship,* 2006, Vol. 24, No. 1, p. 213-224. ISBN 1464-6668.

SCHMIDT, R., EMMERICH, K., SCHMIDT, B.: Applied Games – In Search of a New Definition. In CHORIANOPOULOS, K., DIVITINI, M., BAALSRUD, H. J., JACCHERI, L., MALAKA, R. (eds.): *Proceedings of International Conference on Entertainment Computing*. Tronheim : Springer, 2015, p. 100-111.

SLADE, D. (Director): *Black Mirror: Bandersnatch.* [VOD]. Released on 28th December 2018. Los Gatos : Netflix, 2018.

TEAM SALVATO: *Doki Doki Literature Club!* [digital game]. New Jersey : Team Salvato, 2017.

The human resource machine. [online]. [2020-04-15]. Available at: <https://www.fanfiction.net/s/13553612/1/The-Human-Resource-Machine>.

TOMORROW CORPORATION: *7 Billion Humans*. [digital game]. Chesterfield : Tomorrow Corporation, 2018.

TOMORROW CORPORATION: *Human Resource Machine*. [digital game]. Chesterfield : Tomorrow Corporation, 2015.

WALTON, M., PALLITT, N.: 'Grand theft South Africa': Games, literacy, and inequality in consumer childhoods. In *Language and Education*, 2012, Vol. 26, No. 4, p. 347-361. ISSN 0950-0782.

We Happy Restaurant tagged posts. [online]. [2020-05-17]. Available at: <https://www.tumblr.com/tagged/we-happy-restaurant>.

WORTHAM, J. *Game that critiques Apple vanishes from app store*. Released on 13th September 2011. [online] [2020-03-18]. Available at: <https://bits.blogs.nytimes.com/2011/09/13/game-that-critiques-apple-vanishes-from-app-store/>.

YEE, N.: Motivations of play in MMORPGS. In DE CASTELL, S., JENSON, J. (eds.): *Proceedings of DiGRA 2005 Conference – Changing Views: Worlds in Play*. Vancouver : Digital Games Research Association, 2005, p. 772-775.

The Development of Ethical Education through Digital Games: The Butterfly Effect Implementation

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ABSTRACT:
The demands of educational practice are changing alongside our dynamically changing society. It is, therefore, necessary to purposefully and systematically seek ways to motivate, teach, and develop independent thinking among learners. This theoretical study aims to identify and characterize the essential assumptions and reasons for the implementation of digital games into ethical education classes. The fundamental premise is the thematic variability of game narratives, and a fulfillment of the experience attributes through the interactivity both in terms of the direct interactivity of the learner and the medium and in the subsequent discussion as a part of value reflection. Attention is focused on the process of ethical decision-making, ethical dilemmas, and problems that can be identified in many digital games containing at least a basic narrative structure. Interactive narration includes, besides the story itself, the influence of the participant on the further direction of the storyline, allowing players to see the consequences of their individual decisions within simulated situations. The study explores a game principle – the butterfly effect – in the context of ethical decision-making in particular through the game Detroit: Become Human, as well as demonstrates its usability within ethical education classes.

KEY WORDS:
butterfly effect, decision-making, Detroit: Become Human, digital games, dilemmas, ethical education, game-based learning, storytelling.

Introduction

The present is marked by rapid social, economic, cultural, and technological changes. It is more necessary than ever to reflect them even from an ethical point of view to be able to deliver an opinion on them. Reflection and discussion of current ethical problems must take place at all levels of society and within all age categories. It is necessary to encourage children and young people to do so, both by being a model example to them, and by developing their moral sensitivity and ability to make ethical decisions, solve ethical problems and dilemmas. Everyday educational situations in the family or school provide space for it, and the educator in the widest sense should be prepared to adequately exploit them and actively create them as well. In this context, not only in the educational system of the Slovak Republic, the subject of ethical education represents a unique space for the implementation of activities, a task of which is the development of the mentioned abilities, and which can flexibly react to current social issues. Emphasis on utilizing motivational learning procedures, on a heuristic approach to learners' development, and presentation attractiveness is a challenge for all subjects, including ethical education. Although the essential aspects of the subject of ethical education formulated by L. Lencz (based on the R. R. Olivar's project[1]) are still valid, a comprehensive review reflecting the current challenges of the society is required. One of the possible ways to innovatively expand ethical education methodology lies in the incorporation of modern interactive media such as digital games.

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1   For more information, see: OLIVAR, R. R.: *Etická výchova*. Bratislava : Orbis Pictus Istropolitana, 1992.

The fundamental premise consists of the available variability of games containing narrative elements, and a fulfillment of the experience attributes through both the direct interactivity of the learner and the medium and the subsequent discussion as a part of a value reflection. Storytelling digital games seem to be the optimal type, providing a space for reflecting the ethical context. Current narrative gaming structures even allow players to interact with the storyline's direction through the decision-making process, for example, within the popular principle of the *butterfly effect*. This theoretical study aims to identify and characterize the basic prerequisites and reasons for the application of digital games to ethical education classes, focusing on ethical decision-making, solving ethical problems, and dilemmas. It primarily accentuates the individual's responsibility to others, society, and to oneself (their health, family, etc.).

Utilization of Digital Games in Ethical Education

Games have been used as a learning tool for centuries (e.g., chess for strategic thinking). Game-based learning applies a concept of repetition, failure, and the accomplishment of goals (the same principles on which digital games are built) into a curriculum, thus students actively learn during an effort to reach a goal while choosing actions and experiencing the consequences of those actions.[2] "Games are effective not because of what they are, but because of what they embody and what learners are doing as they play a game".[3] M. Prensky considers digital game-based learning as a gradually emerging alternative learning paradigm (edutainment) with successful results because digital games themselves are potentially the most engaging pastime in the history of mankind and most of the current learners (as well as many educators) already belong to the generation of digital natives, naturally adapted to digital technologies.[4] By reviewing digital game-based learning literature, R. Van Eck determined three general approaches for integrating games into the learning process: educators make students take on the role of game designers to learn the content (learn programming languages, etc.); educators build custom educational games adapted to the curriculum to seamlessly integrate playing into learning; educators integrate existing digital games (educational games, serious games and even commercially published games not necessarily developed for learning) into the curriculum.[5]

The appropriate inclusion and application of digital games in the learning process can motivate students to work, provide experience, and deepen interest in the subject. Besides, it is important to alternate the methods and forms of teaching adequately in the educational process. Within the characteristics of activating teaching, J. Hanuliaková points out the influence of the chosen medium for educational process effectiveness, and, in this context, she also describes, for example, the educational possibilities of virtual reality.[6] When integrating digital games into education, the teacher has the opportunity to utilize the natural interest of children and young people in technology, get closer to their

world, develop a positive climate in the classroom, and ideally to create a forum for discussion on other relevant topics. Learners spend a significant part of their lives at educational institutions. This time should be, therefore, interesting and fulfilling for them, encourage them to study, enable them to develop attitudes towards people and society, shape their value orientation, and their ability to make ethical decisions. The game (in general) is a natural part of human life with a specific position in ethical education didactics. It is both a form and a method. Particularly games containing moral content and role-playing are an important part of ethical education classes.[7] The innovated state educational program of the Slovak Republic[8] defines the mission of the ethical education subject to educate a person with their own identity and value orientation, in which respect for man, life and nature, cooperation and prosociality occupies a significant place. In order to fulfill this vision, it is not enough just to provide information on moral principles, but it is necessary to support the understanding and interiorization of moral standards through experiential learning and to facilitate the adoption of behaviour that is in harmony with them.

The implementation of digital games in the educational process, including ethical education classes, is also accompanied by several limitations, which may complicate or negatively affect the whole process. The first is the inadequate technical equipment of schools because the ability to use game devices to teach may be crucial in this regard. The possible solution is the utilization of mobile games for smartphones, which currently most students have already owned. Another important limitation is the qualified application of digital games to ethical education classes which means not only knowing the content of the specific game but also its technical attributes, as well as its potential for the specific topic and class. The teacher's competence to adequately select and integrate teaching methods and forms, to use material resources, to know the learners' developmental characteristics, and to positively influence the climate in the classroom are directly combined here.[9]

The choice of the digital game belongs to the primary aspects, which affect its effectiveness and purposefulness. The market offers an enormous number of possibilities, but it can easily become paralyzing for a teacher who is not oriented in this area. Qualified application of digital games includes, among others, a clear identification of areas with scope for their functional use. *Serious games*, the integrated educational goal of which is superior to their entertainment function, even beyond edutainment,[10] seem to be adequate, or educators may develop custom digital games matching criteria for the specific purposes of education and game-based learning.[11] The utilization of digital games that were not created for educational purposes is quite established as well (e.g., *Minecraft*[12] for developing STEM skills[13]), particularly due to their availability (unlike the relatively limited repertory of serious games, and professional requirements related to game development) and their ability to mediate complex topics and experiences. Concerning ethical education, the greatest potential probably lies in utilizing the presence of virtual decision-making simulations (and their consequences), additionally involving the player's interaction.

2   CAHILL, G.: *Why Game-Based Learning?* [online]. [2020-04-09]. Available at: <https://thelearningcounsel.com/article/why-game-based-learning>.
3   VAN ECK, R.: Digital Game-Based Learning: It's Not Just the Digital Natives Who Are Restless. In *EDUCAUSE Review*, 2006, Vol. 41, No. 2, p. 18.
4   See also: PRENSKY, M.: *Digital Game-Based Learning*. New York : McGraw-Hill, 2001.
5   VAN ECK, R.: Digital Game-Based Learning: It's Not Just the Digital Natives Who Are Restless. In *EDUCAUSE Review*, 2006, Vol. 41, No. 2, p. 20-21.
6   HANULIAKOVÁ, J.: *Aktivizujúce vyučovanie*. Bratislava : Iris, 2015, p. 16.

7   VACEK, P.: *Psychologie morálky a výchova charakteru žáků*. Hradec Králové : Gaudeamus, 2011, p. 142.
8   *Inovovaný štátny vzdelávací program*. [online]. [2020-04-11]. Available at: <https://www.statpedu.sk/sk/svp/inovovany-statny-vzdelavaci-program/>.
9   For more information, see: SANDANUSOVÁ, A. et al.: *Reflexia aktuálnych poznatkov o kompetenciách učiteľa*. Prague : Verbum, 2018.
10   MICHAEL, D. R., CHEN, S. L.: *Serious games: Games that educate, train, and inform*. Mason : Course Technology PTR, 2005, p. 17-27.
11   JACOBSON, D. et al.: Impairment or Empowerment: Game Design to Reduce Social Stigma for Children with Physical Disabilities. In *Acta Ludologica*, 2019, Vol. 2, No. 1, p. 28-29.
12   MOJANG STUDIOS: *Minecraft*. [digital game]. Stockholm : Mojang Studios, 2011.
13   *Powering Up STEM with Minecraft*. [online]. [2020-05-10]. Available at: <https://education.minecraft.net/blog/powering-up-stem-with-minecraft>.

Ethical Decision-Making and Dilemmas as Part of Digital Games

Ethical decision-making is the process of choosing one of two or more options arising from the ethical principles of the individual and society. It can be characterized as conscious decision-making in accordance with ethics. According to J. Daniel's phases of the decision-making process, the phases of ethical decision-making can be divided as follows:

- *problem (its discovery and specification)* – an essential part of ethical decision-making. Moral sensitivity, the ability to see and perceive moral problems and dilemmas in real life are basic prerequisites for their responsible solution;
- *generating thoughts and ideas* – identification of possible solutions arising from individual ethical theories. The more of them an individual can produce, the greater the chance for one to make the right choices;
- *evaluation of individual thoughts and ideas* – a critical assessment of individual options, prediction of results, knowledge of benefits, as well as possible risks;
- *choosing the best solution to the problem* – at this point, it is necessary to emphasize the motivation to act morally. Although it overlaps the whole process of evaluation, at this point, despite knowing a morally correct decision, an individual may deliberately opt for others (i.e., prioritizing their interests above the interests of society and so on);
- *carrying out the choice (decision)* – concerning this point, it is necessary to emphasize the personality characteristics of an individual, which may affect their ability to make this decision also under pressure.[14]

In addition to these phases, ethical decision-making can be complemented by a backward reflection of carried out choices. Experience with decisions made by an individual in the past affects other decisions to be made by them. Self-reflection, positive or negative experience, and the consequences of the decision affect all phases of the decision-making process. Ethical decision-making generally consists of solving *ethical problems* and *dilemmas*. According to K. Schrier and D. Gibson, digital games "provide an authentic content within which to practice and experience ethical dilemmas and decision-making".[15] The integration of ethical problem choices with mixed results into off-the-shelf games is increasing; it means that players grapple with real-world ethical issues and situations within a fictional game world. The attractiveness of such implementation lies in both the intellectual and emotional involvement of the players. An *ethical problem* can be named more easily than an ethical dilemma, i.e., when analyzing the situation, the right and wrong solutions can be essentially identified. Digital games integrate various mechanics to reflect the implications of choices made by players within an ethically challenging situation. We can observe it, especially in role-playing games. For example, there is positive and negative karma in *Fallout 3*[16]. Overall 'karma score' may then influence the attitude of some non-player characters (NPCs) towards the player, dialogue options, etc. The players in

Mass Effect 2[17] earn 'paragon' or 'renegade' points during the game for playing within rules of morality and law, or more rebelliously above the law. Based on the level of paragon and renegade score, players gain access to unique dialogue options with NPCs, possibly influencing further developing the situation or even the story as a whole.[18]

An *ethical dilemma* is a situation within which an individual has to decide between two or more alternatives, but neither of them is optimal, and choosing one value or norm, violates others. G. Wark and D. Krebs identified 6 dilemmas that people can experience in their lives:

- *Philosophical dilemma* – an abstract, hypothetical and always impersonal dilemma that does not directly affect a man or his closest social surroundings, for example, euthanasia, the death penalty, drug legalization;
- *Antisocial dilemma (1)* – reaction to a misdemeanour, a decision on how to respond to an offense, injustice, or violation of the rules, for example, when a friend is cheating during a test;
- *Antisocial dilemma (2)* – reaction to the temptation to meet own needs, fulfill desires or make a profit immorally, for example, when one lies to parents to avoid punishment;
- *Social pressure to violate own values or identity* – an individual is under pressure from a person/group to engage in activity that violates their values, for example, urging a friend to try narcotics;
- *Prosocial dilemma (1)* – reaction to conflicting demands, when two or more people have conflicting or exclusionary demands on an individual often with subsequent consequences on their relationship, for example, divorcing parents have demands on their child;
- *Prosocial dilemma (2)* – reaction to the needs of others, when the individual feels an inner conflict whether or not they are responsible for some proactive action to support another person, for example, returning to a former partner, because they threaten to commit suicide.[19]

A frequent model situation of an ethical dilemma that has already been applied in various types of media artifacts is *the trolley problem*. The origin of this moral dilemma dates back to the 1970s. It was designed by the philosopher P. Foot, and other philosophers and psychologists analyzed and modified her model example over time.[20] The basic idea lies in decisions of the subject to which track divert the moving trolley – a track with five people or a track with one person. This dilemma has also been implemented in several digital games. Its modified version can be found, for example, in *inFAMOUS*[21] as a choice between rescuing the main character's girlfriend, Trish, or rescuing six innocent doctors (all hanging on two distant buildings with bags on their heads). The decision does not affect Trish's fate in the game, because if the player decides to rescue her, he finds out that the rescued is not Trish but one of the doctors, and Trish was in a group with the

14   DANIEL, J.: *Prehľad všeobecnej psychológie*. Nitra : Enigma, 2003, p. 156.
15   SCHRIER, K., GIBSON, D.: Using Games to Prepare Ethical Educators and Students. In KOEHLER, M., PUNYA, M. (eds.): *Proceedings of SITE 2011 – Society for Information Technology & Teacher Education International Conference*. Nashville : AACE, 2011, p. 1373.
16   BETHESDA GAME STUDIOS: *Fallout 3*. [digital game]. Rockville : Bethesda Softworks, 2008.
17   BIOWARE: *Mass Effect 2*. [digital game]. Redwood City : Electronic Arts, 2010.
18   SCHRIER, K., GIBSON, D.: Using Games to Prepare Ethical Educators and Students. In KOEHLER, M., PUNYA, M. (eds.): *Proceedings of SITE 2011 – Society for Information Technology & Teacher Education International Conference*. Nashville : AACE, 2011, p. 1374-1375.
19   KREBS, D. L., DENTON, K., WARK, G.: Forms and Functions of Real-life Moral Decision-making. In *Journal of Moral Education*, 1997, Vol. 26, No. 2, p. 133.
20   For more information, see: FOOT, P.: The Problem of Abortion and the Doctrine of the Double Effect. In Oxford Review, 1967, Vol. 5, No. 1, p. 5-15.; THOMSON, J. J.: Turning the Trolley. In *Philosophy & Public Affairs*, 2008, Vol. 36, No. 4, p. 359-374.; GREEN, J. D.: *Moral Tribes: Emotion, Reason, and the Gap Between Us and Them*. New York : Penguin Books, 2013.
21   SUCKER PUNCH PRODUCTIONS: *inFAMOUS*. [digital game]. Tokyo, San Mateo : Sony Computer Entertainment, 2009.

other doctors he didn't save. Although the trolley problem is an ethical dilemma, the game presents it as an ethical problem, because depending on the decision, the player gains positive blue-colored karma for saving the doctors (towards 'Hero' ranking) or negative red-colored karma for an attempt to rescue Trish (towards 'Infamous' ranking). Besides the effect on karma, the decision consequences are presented in the following emotionally charged cutscene – dying Trish tells the hero, Cole, that she is proud or ashamed of what he has become.

In *Prey*[22], the trolley problem is applied in its original forms. At the beginning of the game, the player's character takes final tests as a participant of unspecified research. These tests consist of answering questions presented on the computer, including three variations of the trolley problem – activity/inactivity of the subject, the possibility of sacrificing someone, the possibility of self-sacrificing.[23] In this case, the answers have no direct effect on game development, they just reflect the player's way of moral judgment, and thus the possible prediction of how they could deal with the situation set by the storyline – escape the space station in the early stages of the game leaving all survivors behind; eliminate the threat, and saving the station and all survivors; destroy the station, whereby they can die themself, escape and leave all survivors behind, or save the survivors and escape with them. Ethical decision-making and dilemmas seems to be quite common parts of digital games, however, a basic precondition is the presence of at least an elementary *narrative* structure in the game. The story can be considered as a medium that provides players situations containing elements of decision-making possibly placeable in an ethical context. Thanks to the interactivity, dealing with ethical decision-making/dilemmas is carried out at a completely different level, and the link with the narrative itself also contains didactic potential.[24]

Storytelling as a Condition for Ethical Decision-Making and Dilemmas Simulations

Individual media (such as literature, film) containing narrative components and which naturally implement ethical issues and problems into their content are generally considered as attractive educational tools. By contrast, digital games have until recently had no space to establish themselves in ethical education. The possibilities of utilizing digital games in ethical education could be fully explored and researched after the games were able to provide more complex narrative structures, including player's decision-making with possible impacts on the further development of the storyline. Although studies of narrativity related to digital games have not yet reached a comprehensive conclusion, frequent discussion on the topic, whether games can be considered as new narrative media or, conversely, negating any relationship between digital games and narratives, is limited by their orientation to only one aspect of that relationship.[25] It can be assumed that this discussion will dynamically continue and develop, taking into account the increasing amount of new game titles, emerging narrative structures, and game mechanics. The interdisciplinarity of the issue points to a wide range of possibilities for the topic research, but at the same time, it makes it problematic to attain clear conclusions. It is necessary to reflect both the differences and the similarities existing between games and stories because the interconnection of these two natural parts of human life contains significant educational potential.

Stories are a natural part of education with a wide range of possibilities for the application of their educational potential, which is declared, besides others, by scientific projects in various areas dealing with it, exploring the perspectives of work with it, and offering application proposals.[26] The main difference between a traditional story and interactive storytelling is the participant's impact on the storyline.[27] Interactive stories in digital games invite the player to participate in developing the story and directly influence its ending, thus the transition from linear narratives to branching. One of the current attractive narrative structures is the so-called *the butterfly effect* that offers a complex simulation of decisions and their consequences. At the same time, it represents a significant potential for its use in the framework of ethical education. The term butterfly effect refers to a hypothetical scientific concept embraced by popular culture to emphasize the importance of negligible events. It illustrates that some complex dynamic systems exhibit unpredictable behaviour in such a way that small variances in the initial conditions could have significant and considerably divergent effects on the process results.[28] In digital games, it occurs within the player's possibility to choose from several options, which further affect the direction of the game, often including its end. This narrative structure allows us to see the consequences of individual decisions within simulated situations, and also with certain emotional involvement of the player. From games whose stories are based on the butterfly effect principle, we can mention *Heavy Rain*[29], *Until Dawn*[30], *Life Is Strange*[31], *Detroit: Become Human*[32], etc. The natural consequence of applying the butterfly effect is the narrative endings' multiplication, thus the game can have many different endings, depending on the player's key decisions during playing. Heavy Rain, already an iconic game regarding the butterfly effect, provides a total of 17 different endings to the story.[33]

22 ARKANE STUDIOS: *Prey*. [digital game]. Rockville : Bethesda Softworks, 2017.
23 Remark by the author: The third option, an altruistic act, self-sacrificing, was added to the original version by J. J. Thomson.
24 LOMNICKÝ, I. et al.: *Didaktika etickej výchovy pre etickú prax*. Nitra : UKF in Nitra, 2017, p. 62.
25 AARSETH, E. J.: Quest Games as Post-Narrative Discourse. In RYAN, M. L. (ed.): *Narrative across Media. The Languages of Storytelling*. Lincoln, London : University of Nebraska Press, 2004, p. 362.

26 For more information, see: MAGOVÁ, L.: Príbeh ako významný prostriedok výchovy k mravnosti. In *Scientia et Eruditio*, 2019, Vol. 3, No. 2, p. 46-55. [online]. [2020-04-06]. Available at: <http://pdf.truni.sk/see/download?see-2019-02-05-magova.pdf>.
27 TYNDALE, E., RAMSOOMAIR, F.: Keys to Successful Interactive Storytelling: A Study of the Booming "Choose-Your-Own-Adventure" Video Game Industry. In *i-manager's Journal of Educational Technology*, 2016, Vol. 13, No. 3, p. 29.
28 VERNON, J. L.: Understanding the butterfly effect. In *American Scientist*, 2017, Vol. 105, No. 3, p. 130.
29 QUANTIC DREAM: *Heavy Rain*. [digital game]. Tokyo, San Mateo : Sony Computer Entertainment, 2010.
30 SUPERMASSIVE GAMES: *Until Dawn*. [digital game]. Tokyo, San Mateo : Sony Computer Entertainment, 2010.
31 DONTNOD ENTERTAINMENT: *Life Is Strange*. [digital game]. Tokyo : Square Enix, 2015.
32 QUANTIC DREAM: *Detroit: Become Human (PS4 version)*. [digital game]. Tokyo, San Mateo : Sony Computer Entertainment, 2018.
33 Remark by the author: US Gamer, Gamepressure, or Altered Gamer gaming sites state this number, but users at several discussion forums also suggest that Heavy Rain has up to 22 epilogues.

The Butterfly Effect of Ethical Decision-Making in Detroit: Become Human

The topics of artificial intelligence and androids are highly up to date, reflect current social trends, and the game theme itself may figure as a subject of an ethical discussion focusing on the ethical aspects of new technologies, the importance of human rights, etc. H. Jonas states that science fiction narratives might be considered as thought experiments, initiating ethical reflections even about issues such as future realistic and ethically relevant scenarios.[34] The presence of the butterfly effect as a core element of the game allows us to demonstrate ethical decision-making, analyze individual options, and also the consequences of decisions. At the same time, we can use Detroit: Become Human as a model case of applying the butterfly effect principle directly to ethical education classes. In 2012, Quantic Dream published a short video called *Kara*[35] to present "new performance capture techniques and the new engine before going into production, so we developed a short showcase that would allow us to test these ideas and technologies. This is how 'Kara' was created".[36] The video shows the process of assembling an android named Kara, testing its features and capabilities. At a certain point, the reactions of the android begin to conflict with the original settings (Kara says 'I thought...'), and according to the regulations, the worker who assembles it has a clear command to destroy defective pieces. During dismantling, the android's reactions show common features with human ones, but the worker stops the dismantling process only after Kara shouts that she is scared. Even in this short story, we can identify the worker's ethical dilemma, according to Wark and Krebs' classification, a prosocial dilemma. Should he follow the regulations about defective androids, or decide to save the manifested 'human'? The video ends after Kara is reassembled and transferred to a line of other same looking androids. This video also contains other impulses for ethical discussion, for example, when the worker mentions to Kara that she is merchandise. The discussion can also be directed towards slavery, sexual slavery,[37] or human rights and their violations.[38] According to Quantic Dream, the video presented neither their new game, world, or story, and neither was Kara a new game character,[39] however despite this statement, in 2015, the company announced the future release of Detroit: Become Human with Kara as a playable character. Moreover, the game story has common elements and as outline of the basic narrative line presented in this video.

In Detroit: Become Human, the player controls three characters, androids, so when it comes to applying this game to education towards ethical decision-making, the initial discussion should be concerned about ethical decision-making of androids. For example, we can ignore the differences between human and android by considering 'deviancy' of androids in the game as a metaphor for transformation into human (a parallel to acquiring a free will). In the case of implementing this game story into the education process, it is definitely necessary to discuss this fact with learners, however, in a purely technical sense, with digital games, we can always talk about simulation, thus the decision-making subject's characteristics could be a negligible factor - decisions are made by a person, the player, whether playing as a human or an android. The simulation of human actions is also a simulation. Its potential lies in the mediation of experience, which the educator and the students must then elaborate during value reflection.

Detroit: Become Human consists of chapters of varying gameplay length and the complexity of story branching. Several chapters present relatively closed situations, which can be completed within ten minutes, the optimal time for incorporating such game sequence into the learning process. An example is the chapter *Broken* (Picture 1), in which the android Markus and his owner, Carl, are arriving home and find out that lights are on in the studio. They call the police and go to explore the room. They find Carl's son, Leo, trying to steal some of Carl's paintings to gain money for narcotics. Carl tells him to leave his house, but Leo starts accusing him that he likes Markus more than his own son and then turns his anger against Markus. Carl tells Markus not to do anything and still requires Leo to leave his house. The pressure of Leo's verbal and, consequently, physical attacks against Markus makes him 'deviate', break the program to be able to decide whether to obey Carl or not. If he obeys Carl and does nothing to defend himself, Carl will have a heart attack, Leo will accuse Markus, who is subsequently shot by the police. If Markus decides to disobey Carl, he will push Leo, who will fall, hit his head and lose consciousness. Although Carl insists that Markus should leave before the police arrive, he remains and subsequently is shot by the police.
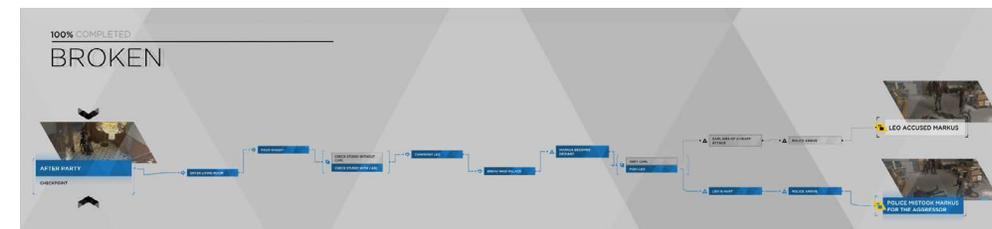
Picture 1: Completely unlocked flowchart of the chapter Broken from the game Detroit: Become Human

Source: author's screenshot; QUANTIC DREAM: *Detroit: Become Human (PS4 version).* [digital game]. Tokyo, San Mateo : Sony Computer Entertainment, 2018.

Other chapters then offer more complex structures consisting of multiple key decisions branching out storylines, including affecting the structure of the following chapters (the beginning of a chapter may reflect the end of the previous one) as well as the overall story. For example, for the android Kara, the story may end early in the game. The chapter *Stormy Night* (Picture 2) is devoted to Kara's deviation after she was a witness to domestic violence on Alice, the girl she should look after. When Alice's life is in danger, Kara must decide to obey her owner, Todd, Alice's father, do nothing and let Todd kill Alice, or not to obey him and try to save Alice. After that decision, the game gains momentum quickly, and has several ethical background situations – try to stop Todd downstairs; go straight for Alice and try to escape her without confronting Todd; take Todd's weapon from the

34 JONAS, H.: *The Imperative of Responsibility: In Search of an Ethics for the Technological Age*. Chicago : The University of Chicago Press, 1985, p. 30.

35 *"Kara" by Quantic Dream*. [online]. [2020-04-07]. Available at: <https://www.youtube.com/watch?v=j-pF56-ZYkY>.

36 SHUMAN, S.: *"Kara" is Not Quantic Dream's Next Game (But You May Wish it Was)*. [online]. [2020-04-07]. Available at: <https://blog.us.playstation.com/2012/03/07/kara-is-not-quantic-dreams-next-game-but-you-may-wish-it-was/>.

37 For more information, see: LUKŠÍK, I., MARKOVÁ, D.: Sexual Lifestyles in the Field of Cultural Demands. In *Human Affairs : Postdisciplinary Humanities & Social Sciences Quarterly*, 2012, Vol. 22, No. 2, p. 227-238.

38 See also: MAGOVÁ, L., MAGO, Z.: Výchova k rešpektovaniu ľudských práv a prosociálne aspekty digitálnych hier. In *Dot.comm*, 2015, Vol. 3, No. 2, p. 49-56.

39 SHUMAN, S.: *"Kara" is Not Quantic Dream's Next Game (But You May Wish it Was)*. [online]. [2020-04-07]. Available at: <https://blog.us.playstation.com/2012/03/07/kara-is-not-quantic-dreams-next-game-but-you-may-wish-it-was/>.

nightstand in his bedroom along the way to Alice. The chapter has 9 possible climaxes, and Todd breaks (kills) Kara even in four of them. In one case, Todd kills Alice, and in four other cases, Kara and Alice manage to escape by bus, while completely avoid Todd, fight him out, or (Kara/Alice) shoot him.
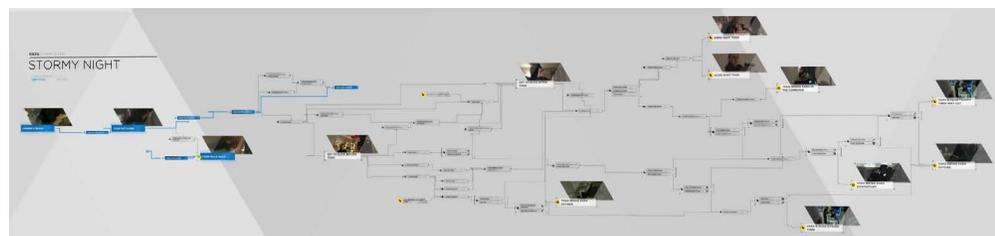
Picture 2: Completely unlocked flowchart of the chapter Stormy Night from the game Detroit: Become Human
Source: author's screenshot; QUANTIC DREAM: *Detroit: Become Human (PS4 version).* [digital game]. Tokyo, San Mateo : Sony Computer Entertainment, 2018.

While discussing decision-making in this situation, the educator could include more aspects possibly affecting decisions such as the previous awareness that Alice is also an android (this is revealed later in the story), or the fact that Todd had already broken Kara once and let her get repaired, which Kara does not remember in the chapter Stormy Night (it is only implied then). Similar complex narrative structures typical of the butterfly effect may be difficult to implement into ethical education classes, which are limited by time and technics. To minimize implementation limitations, the educator himself could create a simplified scenario based on a game narrative preserving the butterfly effect principle that would be applied to the class in a form similar to a live-action role-playing game[40] with students as story characters. The teacher as a gamemaster would supervise the overall development and following the parameters of the situation and then moderate the discussion on ethical-educational aspects of decisions, including the possibility to return to the point of decision and change it. Alternatively, learners themselves could be given the task to create a story scenario on a selected topic with different 'intersections' branching out the storyline and its endings. The proposed teaching design is basically consistent with the concept of gamification within education, a widely discussed issue, the implementation of which has already proved the positive impact of applied gaming mechanisms and principles on activating and increasing learners' involvement in the learning process.[41] In this context, we see the potential of applying similar principles to ethical education classes with a possible positive impact both on the development of student creativity and education towards responsibility, since the primary objective in both proposed concepts is to encourage students to make independent and responsible decisions

Conclusions

The demands of educational practice are changing alongside society, so it is important to emphasize not only the need for a flexible and creative approach by educators but also the need for a purposeful and systematic search for ways to teach in accordance with

those demands. It is a challenge for the content of individual subjects, as well as for the revision of teaching methods and forms. We focus on the potential of digital games for ethical education, not only because of their general attractiveness as a potentially significant motivating factor but also because of a diversity of their use, a multiplicity of mediated game narratives, and the overall dynamics of their development.

The digital-gaming market currently offers a wide range of digital games. One of the essential aspects influencing the effectiveness of digital games within the educational process is the choice of game itself that should be relevant regarding technical and content criteria, and also their possibilities in the moral literacy development. Although taking into account the option of using serious games and custom made games, the utilization of digital games that were not created for educational purposes seems to have pros regarding their variability, width, availability, and proved successes in the field of education (e.g., Minecraft). Concerning ethical education, simulations of ethical decision-making, ethical dilemmas, and problems can be identified in many such games; therefore, we have focused on this direction as a way to shape learners' value orientation, and their ability to make ethical decisions. Our findings indicate that storytelling in digital games (in the presence of at least an elementary narrative structure) is a condition for providing complex ethical decision-making and dilemmas simulations. We consider it another benefit because stories are a natural part of education with a wide range of possibilities also within ethical education. Besides, digital games are capable of mediating interactive forms of storytelling, meaning that the participants can impact the storyline. These aspects commonly appear in games that enable a player to make decisions directly/indirectly affecting the storyline and the overall game direction, such as Heavy Rain, Until Dawn, or Life Is Strange. In this case, the so-called butterfly effect represents an ideal space for the development of skills related to ethical decision-making and solving ethical dilemmas.

Detroit: Become Human is a good example to demonstrate the integration of ethical decision-making and dealing with ethical dilemmas, not only because of the narrative itself but also because the game is divided into different time-consuming and content-intensive sequences. The topics of artificial intelligence and androids are highly up to date, reflect current social trends, and the game story can be an object of an ethical discussion focusing on various ethical aspects related to new technologies, the importance of human rights, and many others. Interactive storytelling includes, besides the story itself, the participant's influence on the direction of the story and its ending. Interactivity, as one of the essential attributes of digital games, is thus extended by the element of narrativity, creating a space for educators and its implementation in education. The mediated experience together with a discussion focused on value reflection represents the main elements of experiential learning. Our proposal to integrate the game Detroit: Become Human or its parts (e.g., chapters) into the educational process of ethical education, alternatively in the form of integrating game elements, particularly the butterfly effect, within the process of gamification, and including learners' participation, demonstrates the use of digital games as educational tools in the hands of a competent educator (taking into account the limits related to the implementation of digital games). It can be assumed that making decisions or creating alternatives to decisions leads learners to independent thinking, active prediction of results, and acceptance of responsibility for the decision consequences.

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40   For more information, see: MOCHOCKI, M.: Edu-Larp as Revision of Subject-Matter Knowledge. In *International Journal of Role-Playing*, 2013, Vol. 4, No. 1, p. 55-93.
41   See also: DICHEVA, D., DICHEV, C., AGRE, G., ANGELOVA, G.: Gamification in Education: A Systematic Mapping Study. In *Educational Technology & Society*, 2015, Vol. 18, No. 3, p. 75-88.

BIBLIOGRAPHY

AARSETH, E. J.: Quest Games as Post-Narrative Discourse. In RYAN, M.-L. (ed.): *Narrative across Media. The Languages of Storytelling*. Lincoln, London : University of Nebraska Press, 2004, p. 361-376.

ARKANE STUDIOS: *Prey*. [digital game]. Rockville : Bethesda Softworks, 2017.

BETHESDA GAME STUDIOS: *Fallout 3*. [digital game]. Rockville : Bethesda Softworks, 2008.

BIOWARE: *Mass Effect 2*. [digital game]. Redwood City : Electronic Arts, 2010.

CAHILL, G.: *Why Game-Based Learning?* [online]. [2020-04-09]. Available at: <https://thelearningcounsel.com/article/why-game-based-learning>.

DANIEL, J.: *Prehľad všeobecnej psychológie*. Nitra : Enigma, 2003.

DICHEVA, D., DICHEV, C., AGRE, G., ANGELOVA, G.: Gamification in Education: A Systematic Mapping Study. In *Educational Technology & Society*, 2015, Vol. 18, No. 3, p. 75-88. ISSN 1176-3647.

DONTNOD ENTERTAINMENT: *Life Is Strange*. [digital game]. Tokyo : Square Enix, 2015.

FOOT, P.: The Problem of Abortion and the Doctrine of the Double Effect. In *Oxford Review*, 1967, Vol. 5, No. 1, p. 5-15. ISSN 0474-9766.

GREEN, J. D.: *Moral Tribes: Emotion, Reason, and the Gap Between Us and Them*. New York : Penguin Books, 2013.

HANULIAKOVÁ, J.: *Aktivizujúce vyučovanie*. Bratislava : Iris, 2015.

Inovovaný štátny vzdelávací program. [online]. [2020-04-11]. Available at: <https://www.statpedu.sk/sk/svp/inovovany-statny-vzdelavaci-program/>.

JACOBSON, D. et al.: Impairment or Empowerment: Game Design to Reduce Social Stigma for Children with Physical Disabilities. In *Acta Ludologica*, 2019, Vol. 2, No. 1, p. 26-41. ISSN 2585-8599.

JONAS, H.: *The Imperative of Responsibility: In Search of an Ethics for the Technological Age*. Chicago : The University of Chicago Press, 1985.

"Kara" by Quantic Dream. [online]. [2020-04-07]. Available at: <https://www.youtube.com/watch?v=j-pF56-ZYkY>.

KREBS, D. L., DENTON, K., WARK, G.: Forms and Functions of Real-life Moral Decision-making. In *Journal of Moral Education*, 1997, Vol. 26, No. 2, p. 131-145. ISSN 0305-7240.

LOMNICKÝ, I. et al.: *Didaktika etickej výchovy pre etickú prax*. Nitra : UKF in Nitra, 2017.

LUKŠÍK, I., MARKOVÁ, D.: Sexual Lifestyles in the Field of Cultural Demands. In *Human Affairs : Postdisciplinary Humanities & Social Sciences Quarterly*, 2012, Vol. 22, No. 2, p. 227-238. ISSN 1210-3055.

MAGOVÁ, L.: Príbeh ako významný prostriedok výchovy k mravnosti. In *Scientia et Eruditio*, 2019, Vol. 3, No. 2, p. 46-55. ISSN 2585-8556. [online]. [2020-04-06]. Available at: <http://pdf.truni.sk/see/download?see-2019-02-05-magova.pdf>.

MAGOVÁ, L., MAGO, Z.: Výchova k rešpektovaniu ľudských práv a prosociálne aspekty digitálnych hier. In *Dot.comm*, 2015, Vol. 3, No. 2, p. 49-56. ISSN 1339-5181.

MICHAEL, D. R., CHEN, S. L.: *Serious games: Games that educate, train, and inform*. Mason : Course Technology PTR, 2005.

MOCHOCKI, M.: Edu-Larp as Revision of Subject-Matter Knowledge. In *International Journal of Role-Playing*, 2013, Vol. 4, No. 1, p. 55-93. ISSN 2210-4909.

MOJANG STUDIOS: *Minecraft*. [digital game]. Stockholm : Mojang Studios, 2011.

OLIVAR, R. R.: *Etická výchova*. Bratislava : Orbis Pictus Istropolitana, 1992.

Powering Up STEM with Minecraft. [online]. [2020-05-10]. Available at: <https://education.minecraft.net/blog/powering-up-stem-with-minecraft>.

PRENSKY, M.: *Digital Game-Based Learning*. New York : McGraw-Hill, 2001.

QUANTIC DREAM: *Detroit: Become Human (PS4 version)*. [digital game]. Tokyo, San Mateo : Sony Computer Entertainment, 2018.

QUANTIC DREAM: *Heavy Rain*. [digital game]. Tokyo, San Mateo : Sony Computer Entertainment, 2010.

SANDANUSOVÁ, A. et al.: *Reflexia aktuálnych poznatkov o kompetenciách učiteľa*. Prague : Verbum, 2018.

SHUMAN, S.: *"Kara" is Not Quantic Dream's Next Game (But You May Wish it Was)*. [online]. [2020-04-07]. Available at: <https://blog.us.playstation.com/2012/03/07/kara-is-not-quantic-dreams-next-game-but-you-may-wish-it-was/>.

SCHRIER, K., GIBSON, D.: Using Games to Prepare Ethical Educators and Students. In KOEHLER, M., PUNYA, M. (eds.): *Proceedings of SITE 2011 – Society for Information Technology & Teacher Education International Conference*. Nashville : AACE, 2011, p. 1372-1379.

SUCKER PUNCH PRODUCTIONS: *inFAMOUS*. [digital game]. Tokyo, San Mateo : Sony Computer Entertainment, 2009.

SUPERMASSIVE GAMES: *Until Dawn*. [digital game]. Tokyo, San Mateo : Sony Computer Entertainment, 2010.

THOMSON, J. J.: Turning the Trolley. In *Philosophy & Public Affairs*, 2008, Vol. 36, No. 4, p. 359-374. ISSN 0048-3915.

TYNDALE, E., RAMSOOMAIR, F.: Keys to Successful Interactive Storytelling: A Study of the Booming "Choose-Your-Own-Adventure" Video Game Industry. In *i-manager's Journal of Educational Technology*, 2016, Vol. 13, No. 3, p. 28-34. ISSN 0973-0559.

VACEK, P.: *Psychologie morálky a výchova charakteru žáků*. Hradec Králové : Gaudeamus, 2011.

VAN ECK, R.: Digital Game-Based Learning: It's Not Just the Digital Natives Who Are Restless. In *EDUCAUSE Review*, 2006, Vol. 41, No. 2, p. 16-30. ISSN 1527-6619.

VERNON, J. L.: Understanding the butterfly effect. In *American Scientist*, 2017, Vol. 105, No. 3, p. 130. ISSN 0003-0996.

Establishing New Genres in Digital Games: The Auto Battler Case Study

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ABSTRACT:
The paper discusses the criteria about how one can establish if a group is a new genre. It distinguishes between two main lines of thinking about genre in general – content and discourse. Both lines have two things to discuss. For content it is similarities and differences in mechanics, and for discourse it is commercial and social purpose of the use of new categories. The case studies then show how this can be applied to the rising auto battler class. There are 7 core mechanics in games that are similar, but every game differs in small details from others. The discourse in the social and commercial sphere has appeared over a short time period, and the adoption of the new genre by the gaming community was therefore fast. The bottom line of the text is that using rigid categories for discussions about digital games cannot focus only on rigid criteria, but also on context.

KEY WORDS:
auto battler, core mechanics, digital games, game typologies, genres studies, modding.

Introduction

The question of art genre has bugged media[1] (but also 'pre-media') researchers for centuries, but real systematic study started in the 1960's, when genre studies appeared.[2] And even though the discussion has been vivid since then, digital games and new media bring many new perspectives to the topic. We are witnesses to quick rises and falls of new forms of texts, and the ways of their classifications after the information revolution are arguably much more varied.

One of the first discussions about new genres in the digital era started in 1999 by asking the question if internet advertisement is a new kind of genre. The researchers reflected on media forms and content transformation effects of the new digital era: "How are we to approach the study of these unstable generic forms in constant rapid evolution?".[3] The question they asked is valid for other types of new media. There is no clear answer to this. As D. Arsenault points out, "no amount of critical thinking can get us (...) to a grand unified and stable genre categorisations".[4] As the classifications serve different purposes for different situations, it seems obvious that there will never be one unified theory, and history of genre discussion in the oldest media shows us that every approach in this regard will become problematic sooner or later. Therefore, in this paper, we do not try to build universal genre definition, or give some simple universal tool based on a strict method. We argue that to name some new group or class[5] of games and genres, we should consider more

1   Remark by the authors: In this text, we use media and art analogically, as we are not talking about performative arts (even though many ideas may apply).
2   Remark by the authors: The genre studies often go beyond media and art genre discussions, but in this paper, we will not dive deeply into ontological discussions.
3   FORTANET, I., PALMER, J. C., POSTEGULIO, S.: The Emergence of a New Genre: Advertising on the Internet (netvertising). In *Hermes, Journal of Linguistics*, 1999, Vol. 23, No. 1, p. 95. [online]. [2020-04-21]. Available at: <https://tidsskrift.dk/her/article/view/25551/22464>.
4   ARSENAULT, D.: Video Game Genre, Evolution and Innovation. In *Journal for Computer Game Culture*, 2009, Vol. 3, No. 2, p 159. [online]. [2020-04-04]. Available at: <https://www.eludamos.org/index.php/eludamos/article/view/vol3no2-3>.
5   Remark by the authors: We also use terms group and class analogically, even though in more ontological or linguistic oriented work, the distinction between things sharing a relationship (group) and things sharing the same attributes (class) may play some role.

perspectives. We propose four key features based on two main approaches, to figure out whether the new group is a genre. These features must be discussed in every instance of a new genre arising, and they should work more as a guide. In later chapters we exemplify this on the 'genre' of auto battlers. We selected this example, for several reasons. First, it is as this is one of the most actual classes of game that we can see growing in the last two years, and secondly, it is one of the examples of participatory culture, that is in many ways unique for the medium of digital games.

Content and Discourse

The idea of classification of content in media forms can be traced to Aristotle's *Poetics*, and his attempts to classify 'poetry' by differences in three categories. He lines three main types of classification, based on matter, subjects and method.[6] This kind of objectivistic approach was prevalent for most of history, but more recent discussions focus also on the author and reader aspects. On the other hand, there are still some reasons to keep this objectivistic approach in mind, as the need for digital classifications of content rises. J. F. Hoorn for example argues for counting different words in literary works, to determine what genre they belong to.[7] These suggestions are quite formalistic in nature – arguably necessary for objective classification, but they basically reject the idea of social and other contexts of the classification of art/media forms. As J. Derrida and A. Ronell point out, genres are subjective. He concludes that "every text participates in one or several genres, there is no genreless text".[8] This means that texts belong to some genre from the moment they emerge. This means that texts are not only a simple part of the genre, they ARE the genre. Therefore, individual texts themselves are participating in the emergence of genres. In Derridian tradition, R. Cohen argues that "classifications are empirical, not logical".[9] But how can we then truly say, that some text is part of this or that genre? To put it simply, the text and the genre are inseparable, there can't be one without another. But if it is so, the obvious chicken/egg paradox rises; where does the new genre come from?

Even though there is no clear and acknowledged distinction by the different authors, we can clearly see the two basic lines of arguments. One focuses on the content of the medium, and the other on the discourse surrounding the medium. We will examine this distinction in more detail in the later chapters. Maybe digital games can help with figuring out some interesting content and discourse processes behind the emergence of new genres. Thanks to the dynamic nature of this relatively new media, it is possible to witness 'births' and 'deaths' of new classes (the biology analogy serves as a metaphor, as death or extinction of a genre is not really possible, because genres can intermix, and even the 'extinct' ones can be brought back to life).[10] One such example is *auto battler*. Appearing for the first time in early 2019, one year later, there are already tens of games being referred to as auto battler. It is not for the first time in digital games history that we can see a new

minor genre rising (i.e., Souls-like, MOBA), but it probably never appeared as quickly as the case study shows. To understand if this class is really a new genre, we first need to examine what exactly game genres are, and what is their role in digital games.

Genres and Digital Games

Since the early history of games classification, the focus has been on how the game is played[11] as the game mechanics are arguably the most important semiotic code in the games. And just like we do not categorize genres in literature by the size of the letters, the fonts, or other 'details', we also do not categorize the genres in games by 'details' like narrative setting, or graphics. This does not mean actors do not use these criteria, only that the mechanics are usually considered the main differentiator (in the famous paper MDA framework this is problematized by a focus on the aesthetics of games, but even though the paper is one of the basic sources for game studies, these categories are not used on a daily basis).[12] In a study of the multi-dimensional typology of games E. Aarseth mentions: "Games are the most culturally rich and varied genre of expression that ever existed. (...) Unlike literature, film, music, painting and architecture, the systematic study of game genres have been mostly neglected over the centuries. Perhaps the reason is that games are so diverse that it is very hard to see what they all have in common".[13] Now this older text is still valid in many ways. Game genre discussions cause various issues and we do not have a lack of authors trying to create game categorizations. E. Aarseth, S. M. Smedstad and L. Sunnanå created typology, which uses dimensions and their values by comparative analysis, which as they propose, can be used to classify any game, two similar games may be compared and their differences identified and described in detail. The fifteen dimensions are grouped under five headings: Space, Time, Player-structure, Control, and Rules, which are based on content.[14] These classifications may work for academic purposes, but due to their complexity it might be hard to understand for the non-academic public. It doesn't have any use for someone who may want to filter games by their needs or wants – e.g., if player want to play some stealth FPS game it doesn't mean he or she wants to decide whether upgrades are or are not conditional, or if environment is or is not being destroyed after using a weapon.

M. J. P. Wolf derived 42 categories (and he calls them genre) of games based on gameplay and interactivity, but excluded other elements such as mood or theme.[15] These categories are also based on content and had problems with classifying one game into various genres (i.e., *Pac-Man*[16] can be in at least 4 categories – collecting, maze, chasing and capturing), or multiple games that should be divided into more genres only in one together (like in genre RPG, where we can bundle MMORPGS such as *World of Warcraft*[17],

6   ARISTOTLE: *Poetics*. Cambridge : Harvard University Press, 1995, p. 15.
7   HOORN, J. F.: How is a Genre Created? Five Combinatory Hypotheses. In *Comparative Literature and Culture*, 2000, Vol. 2, No. 2, p. 4. [online]. [2020-04-21]. Available at: <https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1070&context=clcweb>.
8   DERRIDA, J., RONELL, A.: The Law of Genre. In *Critical Inquiry*, 1980, Vol. 7, No. 4, p. 55.
9   COHEN, R.: History and Genre. In *New Literary History*, 1986, Vol. 17, No. 2, p. 210.
10   JAUSS, H. R.: *Toward an Aesthetic of Reception*. Minneapolis : University of Minnesota Press, 1982, p. 49.; ALTMAN, R.: *Film/Genre*. London : British Film Institute, 1999, p. 70.; ARSENAULT, D.: Video Game Genre, Evolution and Innovation. In *Journal for Computer Game Culture*, 2009, Vol. 3, No. 2, p. 149. [online]. [2020-04-04]. Available at: <https://www.eludamos.org/index.php/eludamos/article/view/vol3no2-3>.

11   CAILLOIS, R.: *Man, Play, and Games*. Chicago : University of Illinois Press, 2001, p. 11-14.; APPERLEY, T. H.: Genre and game studies: Toward a critical approach to video game genres. In *Simulation & Gaming*, 2006, Vol. 37, No. 1, p. 11.; BUČKOVÁ, Z.: Typology of Game Principles in Digital Games: A Case Study of Mafia III. In *Acta Ludologica*, 2019, Vol. 2, No. 1, p. 48-49.
12   HUNICKE, R., LEBLANC, M., ZUBEK, R.: *MDA: A Formal Approach to Game Design and Game Research*. [online]. [2020-04-21]. Available at: <https://www.researchgate.net/publication/228884866_MDA_A_Formal_Approach_to_Game_Design_and_Game_Research>.
13   AARSETH, E., SMEDSTAD, S. M., SUNNANÅ, L.: A Multidimensional Typology of Games. In RAESSENS, J., COPIER, M., GOLDSTIN, J., MÄYRÄ, F. (eds.): *DiGRA '03 – Proceedings of the 2003 DiGRA International Conference: Level Up*. Utrecht : Digital Games Research Association, 2003, p. 48.
14   Ibidem, p. 49-53.
15   WOLF, M. J. P.: *The medium of the video game*. Texas : University of Texas Press, 2002, p. 116-134.
16   NAMCO: *Pac-Man*. [digital game]. Tokyo : Namco, 1980.
17   BLIZZARD ENTERTAINMENT: *World of Warcraft*. [digital game]. Irvine : Blizzard Entertainment, 2004.

JRPG such as *Pokémon Blue*[18] and *Red*[19], and action RPG such as *The Witcher*[20]). G. King and T. Krzywinska in 2002 made 4-tiered hierarchy-based interactivity rather than narrative: platform referred to the gaming hardware; genre referred to "broad categories such as 'action-adventure', 'driving', or 'strategy'; mode referred to players' experiences of the gameworld; and milieu referred to 'location and atmospheric or stylistic conventions".[21] One of the more recent ideas of game classification comes from Ha Lee and her team. They suggest a so-called *facet analysis*. Twelve facets, such as purpose, temporal aspect or setting serve as different criteria for finding similarities and differences in games. Two facets are important from our perspective: gameplay, and style. In their understanding, gameplay is one of 10 basic genres (i.e., Action, Fighting, RPG or Strategy) and style describes more specific genres (i. e. Platformer, Shump, Run and gun, etc.).[22] This classification is based on a strong theory and methods, but unfortunately, the complexity of the system makes it hard for more practical use. If we want to look at the topic from a practical point of view, one of the places to look shall be the online game distribution platforms, as they all have at least some sort of classification that is focused on the users. These platforms also use diverse game categories by genres or styles.

On the Steam store, users can browse games in twelve genre categories.[23] These categories deviate only in details from other major stores such as Epic Store or GOG. But the Steam store offers one crucial feature for our discussion – *tags*. Tags not only can include previous genres, so users can simply merge two genres into one filter, but also add tags not mentioned in genre filtration.[24] The crucial difference to other classifications, the tags on Steam store also lets users tag games. The process is not purely in the hands of the users, but: "Tags can be applied to a game by the developer, by players with non-limited accounts, and by Steam moderators. This allows players to help mark-up games with terms, themes, and genres that are relevant and help describe the game".[25] This is a perfect example of discursive classification. We can clearly see the important role in participatory culture, and the lively 'discussion' between involved actors. In this chapter, we show how most of the genre classifications are based on the content of the games. But with rising user participation (and considering the subjectivist approaches mentioned in previous chapters), the question of genre needs to be discussed from the perspective of discourse.

Modding and New Genres

It is with no surprise that the idea of the evolution of the media genre arose, with acknowledgement of evolution in biology. D. Arsenault even indicates that 'survival of the fittest literature' was a major paradigm.[26] Unfortunately, the idea of survival of the fittest is not the best understanding of evolutionary biology. This concept is very misleading, as survival is only a small part of the evolution process, and fitness of species is not that relevant in evolution. Evolution is about adapting to a changing environment.[27] In this regard, the concept of genre evolution is still relevant, and as will be shown in this chapter, it may be even more relevant in digital games. E. Aarseth argues that the computer software environment, and especially digital games, is a new form of text.[28] He calls this new form of text *cybertext*, and he aligns two key functions, which differentiate it from linear texts and hypertexts. First (*configurative*) is the necessity for the continuous and persistent interpretation of ongoing events on the screen, and configuring of actions accordingly. But he also recognizes that games are not only played. Due to their digital essence, most of the games can be changed in some way. He calls this function of cybertext *textonic*, as at this level, the texton of the game is modified.[29]

The most notable example of a new genre arising from a mod are multiplayer online battle arenas (MOBAs). The first instance of this genre was a mod for *StarCraft*[30] called *Aeon of Strife*, but much more popular was the mod *Defence of the Ancients* for *Warcraft III: Reign of Chaos*[31] from 2003. In 2009, Riot Games released *League of Legends*[32], which in many ways reshaped the digital games market. With the rise of popularity of League of Legends, the new genre was quickly recognized by the community and the market. Journalist Christian Nutt in an interview with developers Gabe Newell and Erik Johnson said that the word MOBA was first used by Riot Games, and Gabe Newell did not know the meaning of the acronym. That was in 2001, when Valve was already developing *Dota 2*[33].[34] There can be little doubt that without the kind of participatory culture special to digital games, the evolution of genres would have gone in a very different direction. This participatory culture also has many real-life consequences. Modders can become programmers or designers for a living, some even find work in the very company that released the game he or she was modding.[35] They can become celebrities, sometimes even better known than the original game creators. One such example can be Dean Hall, author of a popular mod for the game *ARMA 2*[36] called *DayZ*. This strongly intensifies the role of the consumer in participatory culture and it brings an interesting shift in the author – consumer relationship, as the line becomes much more blurred. Now the consumer does not only modify one text, he or she can in a sense create a whole new class in the form of genre. For discussions about genres in digital games the modding culture generally means that we can track down not only 'adoptive parents' (the inspirations) but also 'biological parents'

18   GAME FREAK: *Pokémon Blue*. [digital game]. Kyoto : Nintendo, 1996.
19   GAME FREAK: *Pokémon Red*. [digital game]. Kyoto : Nintendo, 1996.
20   CD PROJEKT RED: *The Witcher*. [digital game]. New York : Atari, 2007.
21   CLEARWATER, D. A.: What Defines Video Game Genre? Thinking about Genre Study after the Great Divide. In *Loading...*, 2011, Vol. 5, No. 1, p. 29. [online]. [2020-04-04]. Available at: <http://journals.sfu.ca/loading/index.php/loading/article/view/67/105>.
22   LEE, H. J. et al.: Facet Analysis of Video Game Genres. In KINDLING, M., GREIFENEDER, E. (eds.): *iConference 2014 Proceedings*. Illinois : iSchools, 2014, p. 127. [online]. [2020-03-27]. Available at: <https://www.ideals.illinois.edu/bitstream/handle/2142/47323/057_ready.pdf?sequence=2&isAllowed=y>.
23   *Store*. [online]. [2020-04-13]. Available at: <https://store.steampowered.com/>.
24   *Popular brands*. [online]. [2020-04-13]. Available at: <https://store.steampowered.com/tag/browse/#global_492>.
25   *Steam tags*. [online] [2020-04-04]. Available at: <https://partner.steamgames.com/doc/store/tags>.

26   ARSENAULT, D.: Video Game Genre, Evolution and Innovation. In *Journal for Computer Game Culture*, 2009, Vol. 3, No. 2, p. 159. [online]. [2020-04-04]. Available at: <https://www.eludamos/index.php/eludamos/article/view/vol3no2-3>.
27   COLBY, Ch.: *Introduction to Evolutionary Biology*. [online]. [2020-03-20]. Available at: <http://www.talkorigins.org/faqs/faq-intro-to-biology.html>.
28   Remark by the authors: The basic level of text is linear and can be seen in most media, and the reader does not give much inputt into it. Second level is hypertext, where the reader can explore the text when he or she has an option. But in most games, there are so many options to do, that the concept of hypertext cannot explain the digital games and similar environments.
29   AARSETH, E.: *Cybertext: Perspectives on Ergodic Literature*. Baltimore : The Johns Hopkins University Press, 1997, p. 67.
30   BLIZZARD ENTERTAINMENT: *StarCraft*. [digital game]. Irvine : Blizzard Entertainment, 1998.
31   BLIZZARD ENTERTAINMENT: *Warcraft III: Reign of Chaos*. [digital game]. Irvine : Blizzard Entertainment, 2003.
32   RIOT GAMES: *League of Legends*. [digital game]. Los Angeles : Riot Games, 2009.
33   VALVE: *Dota 2*. [digital game]. Bellevue : Valve, 2013.
34   NUTT, Ch.: *The Valve Way: Gabe Newell and Erik Johnson Speak*. [online]. [2020-01-15]. Available at: <https://www.gamasutra.com/view/feature/6471/the_valve_way_gabe_newell_and_.php?page=3>.
35   For more information, see: SOTAMAA, O.: When the Game Is Not Enough: Motivations and Practices Among Computer Game Modding Culture. In *Games and Culture*, 2010, Vol. 5, No. 3, p. 239-255.
36   BOHEMIA INTERACTIVE: *ARMA 2*. [digital game]. Prague : Bohemia Interactive, 2009.

(the original game) of new genres arising from mods. This is an argument against dismissing the idea of the biological evolution metaphor in genre evolution, as the relationship between the genres is much closer. But we need to understand evolution as a series of intricate relationships between species and their single representatives, and as a force of adaptation to the environment (where the environment is the digital games market), rather than a simplistic idea of survival of the fittest.

New Genre Key Features

As we discussed in the previous chapter, genre classification in digital games is mostly based on content (primarily on game mechanics). This approach follows a more objectivistic line, which has origins in the aristotelian/platonistic idea of genres as basically fixed sets which can be examined per se. There is no doubt about the importance of these criteria, but we argue that it is merely a prerequisite to becoming a new genre. As pointed out by Derida, Bakhatin and their successors – the genre is mostly a discourse or a social construct, and there are many purely practical reasons behind their definitions or uses. In this chapter, we will discuss four key features based on these two lines of argument. In a content-based view the key features are: Category of genre *merges/clusters games with similar traits*, but *some traits must differ*. And for a discursive view the features are: Category of genre *serves social purpose* and it *serves for commercial use*.

Content in Games

It is clear that to call some group a genre, it must have some traits in common. But what traits should they be? As we showed in the previous chapter, one of the most recognized differentiating traits are game mechanics. We still have to keep in mind that "the traits that are shared do not necessarily share the same function".[37] Therefore, to talk about a new genre, one must understand how the selected media type uses these traits, and how their use evolves over time. Even though it is a somewhat fluid concept and we cannot draw a strict line between core and minor mechanics, they can be analysed and discussed, and defined. L. Konzack[38] calls this gameplay and suggests we should focus on these attributes:
- *Positions* – this one is more closely related to players and society;
- *Resources* – the means by which the players are able to influence the game;
- *Space* – the space of the game, and also the space of the real world;
- *Time* – the time limit set for the game duration;
- *Goal (sub-goals)* – what is needed to win the game. Sub-goals are what are needed to partially reach the main goal;
- *Obstacles* – the challenge of the game comes from obstacles;
- *Knowledge* – open knowledge (i.e. rules), hidden knowledge (i.e. strategy of others), and random knowledge (i.e. rolling dice);
- *Rewards/penalties* – i.e., points, money, time, space or resources that may be won or lost during the game.

M. Consalvo and N. Duton went deeper in their approach, and they created an inspirational set of questions to be asked about the game during qualitative research. They are based around four basic categories: Object inventory, Interface study, Interaction map, and Gameplay log.[39] These categories are not very useful in formal analysis though, as they do not cover topics like *metagame*[40] or time, which can strongly influence the way the game is played. On the other hand, overly formalistic approaches such as tools for classifications based on similar traits, by multidimensional typology of games,[41] which is in many ways too formalistic, and seems too rigid for clustering or merging the genres, as more and more games are combinations of those types – for example many experimental games such as *Superhot*[42] breaks the temporal dimension. The second key feature arises from the acknowledgment of the fact that "No text which is denominated 'novel', for example, has traits that will identify all texts within the class".[43] But with digital games, where we create genres based on game mechanics, the situation gets a little bit tricky. The thing is, it is not so hard to basically copy all the game mechanics (or even simply copy the code), and add different visual and sound effects. This is usually done with simpler games. In popular language these are called clones, even though they are not absolutely similar.[44] The very word used exemplifies how the prime language considered in digital games is the game mechanics. That is also one of the reasons why we do not have genres such as Flappy-Bird-like, or Monument-Valley-like genre, even though there were many of them.

To stay with the evolutionary biology metaphor, the genre resembles more living organisms, which evolve over time, change, and adapt to the consumers expectations. And once in a while a new genre/species arises from these tweaks, but the evolution does not stop. New games in the new genre almost always change some minor mechanics. Sometimes they do not change the gameplay so much, but sometimes they can willingly embrace different aesthetics. One such example may be the difference between levelling systems in League of Legends and *Heroes of the Storm*[45]. In League of Legends, heroes level up individually, which emphasizes more competitive play in the team. Meanwhile in Heroes of the Storm the whole team levels up together, which emphasizes more cooperative play. To conclude this chapter, we argue that when discussing if some category can be a new genre, we should examine the similarities and differences in the key representatives of said genre. The examples of methodological approaches from above serve mostly as inspiration, as their role is more useful in qualitative research focused on single games or competitions, not on identifying new classes. To determine if the class is or is not a new genre, first we need to discuss core game mechanics in general. The question we must ask is, whether we can create basic categories, in which we can draw down the key differences and similarities in game mechanics. These categories will differ from group to group, and it would be counterproductive to name all possible categories, as the nature of studying human creativity dictates, these categories are never going to be totally rigid and hence they must be created in context.

37   COHEN, R.: History and Genre. In *New Literary History*, 1986, Vol. 17, No. 2, p. 207.
38   KONZACK, L.: Computer Game Criticism: A Method for Computer Game Analysis. In MÄYRÄ, F. (ed.): *Proceedings of Computer Games and Digital Cultures Conference*. Tampere : Tampere University Press, 2002, p. 93-94.

39   CONSALVO, M., DUTTON, N.: Game analysis: Developing a methodological toolkit for the qualitative study of games. In *Game Studies*, 2006, Vol. 6, No. 1. [online]. [2020-03-20]. Available at: <http://gamestudies.org/06010601/articles/consalvo_dutton#app1>.
40   Remark by the authors: In example meta in MOBAs is arguably one of the strong reasons for their popularity.
41   AARSETH, E., SMEDSTAD, S. M., SUNNANÅ, L.: A Multidimensional Typology of Games. In RAESSENS, J., COPIER, M., GOLDSTIN, J., MÄYRÄ, F. (eds.): *DiGRA '03 – Proceedings of the 2003 DiGRA International Conference: Level Up*. Utrecht : Digital Games Research Association, 2003, p. 49-53.
42   SUPERHOT TEAM: *Superhot*. [digital game]. Lodz : Superhot Team, 2016.
43   COHEN, R.: History and Genre. In *New Literary History*, 1986, Vol. 17, No. 2, p. 205.
44   ARSENAULT, D.: Video Game Genre, Evolution and Innovation. In *Journal for Computer Game Culture*, 2009, Vol. 3, No. 2, p. 164. [online]. [2020-04-04]. Available at: <https://www.eludamos.org/index.php/eludamos/article/view/vol3no2-3>.
45   BLIZZARD ENTERTAINMENT: *Heroes of the Storm*. [digital game]. Irvine : Blizzard Entertainment, 2015.

Discourse in the Culture

There are two somewhat opposing ideas about the role of genre in discourse. As A. J. Devitt points out: "a better understanding of genre may help us understand better how writers know when and what to revise".[46] M. M. Bakhtin also argues that "every significant genre is a complex system of means and methods for the conscious control and finalization of reality. (…) Human consciousness possesses a series of inner genres for seeing and conceptualizing reality. (…) The artist must learn to see reality with the eyes of the genre".[47] On the other hand, game journalist E. Johnson points out that "naming your genre, especially a young one, is just a tool to kind of help explain to customers what kind of game you have".[48] Both the author and the consumer live in the social world, and probably also in the discourse of the given media and culture they live in and so on. One game refers to another, and the genre rises from the 'discussion' between producers and consumers. R. Cohen argues that reasons for different groups of people (i.e., critics, authors, readers…) having interest in classification of media content differ.[49] He argues that we need to acknowledge the existence of genres in media, because "genres provide expectations for interpretations, and, a variant of this, genres provide conventions for interpretation".[50]

We can see the same logic in digital games, where the genre also serves as a tool for consumers to know which other games the title of his or her interest refers to. This requires some knowledge on the side of the consumer, as "The only chance the player has to do this is by knowing the genre and thereby knowing what to expect".[51] So there is no doubt that calling some new group of texts a new genre is the function of orientation on the consumer. But since the newly forming genres contain only a small amount of titles, they will not usually have separate categories of their own in shops, but they may i.e. have their own tag in online distribution platforms, so players can find similar games in the same category. These tags can help us conclude if we can talk about a new genre, as it shows what people consider a new genre.[52] But as mentioned earlier, Devitt points out that we have to think in a product perspective when talking about genre.[53] Using the category of genre is crucial for marketing analysis. It defines how and on whom to focus the campaign. It also gives a common language to investors and creators. Imagine pitching a new RPG game, with the necessity of describing all the basic rules of the RPG genre. But how to pitch something, that has such different game mechanics that any genre criteria does not fit? Probably hardly with difficulty.

That might be one of the reasons why we recently see so many new genres in games arising from the indie or modding community. But creating only one mod is not sufficient to create a new genre, as "the prototypical work is a qualification ad hoc but not a priori"[54]

46   DEVITT, A. J.: Generalizing about Genre: New Conceptions of an Old Concept. In *College Composition and Communication*, 1993, Vol. 44, No. 4, p. 582.
47   BAKHTIN, M.: *Speech Genres and Other Late Essays*. Austin : University of Texas, 1986, p. 133-134.
48   NUTT, Ch.: *The Valve Way: Gabe Newell and Erik Johnson Speak*. [online]. [2020-01-15]. Available at: <https://www.gamasutra.com/view/feature/6471/the_valve_way_gabe_newell_and_.php?page=3>.
49   COHEN, R.: History and Genre. In *New Literary History*, 1986, Vol. 17, No. 2, p. 205.
50   Ibidem, p. 210.
51   KONZACK, L.: Computer Game Criticism: A Method for Computer Game Analysis. In MÄYRÄ, F. (ed.): *Proceedings of Computer Games and Digital Cultures Conference*. Tampere : Tampere University Press, 2002, p. 97.
52   Remark by the authors: Considering of course, that the tags can be selected and added by users, as is the case in Steam.
53   DEVITT, A. J.: Generalizing about Genre: New Conceptions of an Old Concept. In *College Composition and Communication*, 1993, Vol. 44, No. 4, p. 574.
54   HOORN, J. F.: How is a Genre Created? Five Combinatory Hypotheses. In *Comparative Literature and Culture*, 2000, Vol. 2, No. 2, p. 3. [online]. [2020-04-21]. Available at: <https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1070&context=clcweb>.

without the involvement of larger companies, which can invest in game production value and marketing is not likely. We can see this in the rise of searches for the word MOBAs[55] one year after releasing League of Legends and *Heroes of Newerth*[56], two more advanced MOBAs, than the founding mods for StarCraft (Aeon of Strife) and Warcraft III: Reign of Chaos (Defence of the Ancients). Therefore, if we consider genres as "social contract between writer and particular public"[57] and that most digital games are commercial products or services, we argue that the other two important conditions for new genres in digital games are the social and commercial purpose of said genre.

Content: How Are Auto Battlers Played?

As we mentioned before, we are witnessing quick rises and falls of new forms of media. From what we could see auto battlers rose quickly from nearly nothing. They began as one custom game mode made for Dota 2 and for now we can define 5 auto battler games that have publicity and millions of players.[58] Auto battler merges genres such as strategy, chess, tower defence and elements of MOBA games (for *Dota Underlords* – Dota 2, for *Teamfight Tactics* – League of Legends). As we have seen before with MOBA games like League of Legends or Dota 2, which both came from custom games, auto battlers follow the same line. We set out to list the *core mechanics*, the common elements of these games, to point them out, to show there are common mechanics, but that these games aren't clones of one another:

1. Games offer a chessboard or a modified chessboard where players deploy their champions that fight with other player's champions or neutral monsters.
2. Champions do mostly have one main ability that is used after the mana of that champion is at maximum. Mana is gained after auto attacking an enemy or receiving damage from enemy champions. Players can buy champions that are of two or three classes, which can be combined to receive bonuses. Champions can be levelled up by buying three of the same champion.
3. Players may acquire items that may be used in battle for various purposes.
4. Every player has an avatar with hit points. Each avatar's main use is to deploy champions and cannot be used while duelling (they don't participate in battle) except in Dota Underlords where an avatar can fight and also has its own abilities and HP. After an avatar receives the amount of damage that brings it to zero hit points, the avatar dies and the player cannot participate in duels anymore. The game continues for other players until one avatar (or player) remains. This player is the winner of the game.
5. The game has rounds, during which players duel with each other. The winner of the round gives damage to the loser. The amount of damage is dependent on the number of rounds that were played and champions that haven't died on the winner's side.
6. All these games use some kind of currency, like gold pieces, that can be used for buying new champions or experience points which raise the level of the player. The player with the higher level has more champions that can be placed on the chessboard.

55   *MOBA*. [online]. [2020-03-15]. Available at: <https://trends.google.com/trends/explore?date=all&q=MOBA>.
56   S2 GAMES, FROSTBURN STUDIOS: *Heroes of Newerth*. [digital game]. Singapore : Frostburn Studios, 2010.
57   COHEN, R.: History and Genre. In *New Literary History*, 1986, Vol. 17, No. 2, p. 208.
58   GOSLIN, A.: *Which auto battler should you play: Teamfight Tactics, Underlords, or Dota 2 Auto Chess*. [online]. [2020-04-14]. Available at: <https://www.polygon.com/2019/6/27/18759592/auto-battler-teamfight-tactics-underlords-dota-2-auto-chess-differences>.

7. Auto battlers may be played in various modes such as Normal or Ranked.

Some minor deviations from this basic concept may (and probably will) appear in future. It is possible that this list of core game mechanics will need to be updated, but at this time, these core mechanics are what all auto battlers have in common. That's also the reason why we have decided to use these mechanics in our short case studies for the most popular auto battlers we could find.[59] S. Malliets suggests an approach of qualitative content analysis of games based on topics of interests or elements to discuss, from which 5 are related to gameplay: Complexity of controls, Game goals, Character and object structure, Balance between user input and pre-programmed rules, and Spatial properties of the game world.[60] This categorization led us to adapt 7 categories to compare the differences between individual games referred to as auto battlers. The categories are: *Board*, *Items*, *Time*, *Winning/losing conditions*, *Start*, *Characters* and *Meta*.

Dota Auto Chess (Drodo Studio)

Auto chess game mod for Dota 2 has a QR code in the loading screen which takes the player to the google app store or apple store.

Table 1: Dota Auto Chess analysis

Board	Dota Auto Chess made by Drodo Studio as a custom game mod for Dota 2 uses the same chessboard as traditional Chess. Players use only 4 x 8 rows of tiles from 8x8 available on the chessboard. The other half of the chessboard is used by various monsters or enemy players in symmetric multiplayer mode.
Items	The game starts with a shopping phase in which the player buys champions from the shop. In the first three rounds they have to fight creeps (small units which may drop items that can be used for players units making them stronger). Each player may drop 26 various items Overtime, 18 items can be used to make 25 different items by making the right combination.[61] Drop rate increases as the game progresses and players fight stronger creeps.
Time	In the game, there are 12 waves of different monsters. Within waves of creeps players duel each other with their champion deck on the chessboard.
	After losing a duel, players lose some percentage of hitpoints. The last player remaining in the game is the winner.
Start	A player starts the game with 1 gold which may be used for buying his first champion. Every following round the player gets passive income. Gold can be used for buying new champions or increasing a player's experience level that indicates how many champions he or she can have on the chessboard.
Characters	Champions used in this game mode are the same as in Dota 2, their looks, abilities and names are the same. Champions that are being used on players' chessboards have two of X classes. Players can make their champions stronger by combining champions in the same class. Players can make champions stronger also by buying the same units that he or she already has. Three same champions merge and create a champion which is level 2 with higher damage and durability. Players can also make level 3 champions by merging two same level 2 champions.

59   Remark by the authors: All mechanics and all Auto battler studies – as of October 2019.
60   MALIET, S.: Adapting the Principles of Ludology to the Method of Video Game Content Analysis. In *Game Studies*, 2007, Vol. 7, No. 1. [online]. [2020-04-26]. Available at: <http://gamestudies.org/0701/articles/malliet>.
61   *Items*. [online]. [2020-01-12] Available at: <https://dotaautochess.gamepedia.com/Items>.

Meta	This game mod may be played as 'normal' game when nothing happens after losing or winning, as in ranked games, by gaining 6 different ranks inspired by chess figures such as pawn, knight, bishop, castle, king and queen. Under these ranks players can achieve sub-ranks that are numbered from 1 to 10. Once the player hits the highest sub-rank, the player is moved to the next highest rank.

Source: own processing

Auto Chess (Dragonest Game)

Table 2: Auto Chess analysis

Board	Uses the same chessboard as traditional Chess uses. Players use only 4 x 8 rows of tiles from 8x8 available on the chessboard. Other half of the chessboard is used by various monsters or enemy players in symmetric multiplayer mode. This is the same as for Dota Auto Chess.
Items	This auto battler game shares most of the mechanics as the previous game. Items can be used for champions, which gives them abilities.
Time	This variation of auto battler puts 8 players together into a match which is 2 less than in Dota Auto Chess or Dota Underlords or Teamfight tactics. Waves of monsters and battling phases remain the same.
Winning/Losing Conditions	Game mechanics aren't changed and works exactly the same as their previous mod for Dota 2. Last man standing is the winner. Player who loses all hit points dies and cannot participate in the match.
Start	Player starts the game with 1 gold which may be used for buying his first champion. Every following round the player gets passive income. Gold can be used for buying new champions or increasing a player's experience level that indicates how many champions he or she can have on the chess board. This is also the same as before in Dota Auto Chess mode.
Characters	Champions used in this variation of this new game class are inspired by the champions in Dota 2. They share the same design and also abilities, their looks are a little different but players who recognize Dota 2 champions can easily name them. The mechanics of merging and levelling up remains the same as for Dota Auto Chess.
Meta	This game may be played in four different styles. In the Classic Mode 8 chess players fight on their own using heroes randomly drawn from the shared card pool to create their own formation. Then the chess pieces will fight automatically. Defend the offense from opponents and survive to the end. In Duo Mode two players share their health and fight against other 3 opposing teams.[62] Fantasy mode is rotated weekly. It changes the game rules. In the Quick Mode player doesn't have to purchase experience points, there is no gold interest. Creeps are omitted, so they aren't there to give items. As long as you survive to Round 15, you will have 7 rare pre-combined items. The way the items drop on the board is similar to the Creep rounds in Classic Mode. The winner can choose one of the three options, while the loser can only get one random item.[63]

Source: own processing

62   *Introduction of Auto Chess*. [online]. [2020-04-12]. Available at: <https://ac.dragonest.com/en/gameIntroduction>.
63   *Development Log: Quick Mode*. [online]. [2020-04-12]. Available at: <https://ac.dragonest.com/en/news/detail/e5b6992e4b9>.

Dota Underlords (Valve)

Board	Dota Underlords uses a traditional 8x8 chessboard, the concept of the game and the mechanics are the same as with auto chess custom game for Dota 2.
Items	Items may drop from monsters as in the other types of this auto battler game. They can be combined and added to the players' champions giving them more power.
Time	8 players duelling each other until the last one remains. Game has the same mechanics as other auto battlers, so planning and battling phases remain the same.
Winning/Losing Conditions	Game mechanics aren't changed and work exactly the same as their previous mod for Dota 2. Last man standing is the winner. Player who loses all hit points dies and cannot participate in the match.
Start	At the start of the game the player has 1 gold which should be used to buy the first champion which will battle monsters.
Characters	In other auto battler games players have one character which doesn't fight alongside his champions, but Dota Underlords made one huge change in mechanics giving players an option to choose his or her own 'underlord' before the match which fights alongside the champions 'crew'. Underlords have their own talents that bring different playstyles into the game. This game also uses champions from Dota 2 and the levelling up and shopping phases remain the same.
Meta	In Dota Underlords players may play normal games and also ranked games with various rankings such as: upstart, grifter, outlaw, enforcer, smuggler, lieutenant, boss, big boss, lord of white spire. Each rank badge below Lord of White Spire is further divided into five tiers, indicated by colours and roman numerals. Green I, Blue II, Red III, Pink IV, Gold V.[64]

Source: own processing

Teamfight Tactics (Riot Games)

This game shares the League of Legends client where players may choose which game mode or map, they want to play. Teamfight Tactics is one of the possibilities.

Board	The board of Teamfight Tactics doesn't resemble chess, as the game uses hexagons instead of squares. It has 6 rows with 7 tiles each, and the player uses only half of them – 3 rows with 7 tiles each. Unlike in Auto Chess, Teamfight tactics don't start with the shopping phase.
Items	Items may drop from monsters that players fight. Items can be found also on champions that are around the carousel.
Time	10 players duelling each other until the last one remains. The game has the same mechanics as other auto battlers, so planning and battling phases remain the same. (mobile version of this game has 8 duelling players, but the game is in early access so it may change before launching the app)

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64   *Ranked*. [online]. [2020-04-06] Available at: <https://dotaunderlords.gamepedia.com/Ranked>.

Winning/Losing Conditions	Last man standing is the winner. Player who loses all hit points dies and cannot participate in the match.
Start	Players start around a carousel that contains champions with items on them. After a few seconds players can pick one of them and if the player won't pick, he or she gets one at random. Players are then teleported to their own chess boards and the game starts with the first wave of minions. In this round the player may drop items, gold or champions. After this round, shops appear and players may buy another champion. In every preparing phase players can buy, sell, merge or move champions around the board. As in Auto Chess champions that players buy are level 1 and they're levelled by the same mechanics.
Characters	This auto battler game uses champions from League of Legends. Mechanics about merging and levelling up champions remains the same.
Meta	This game mod may be also played as a ranked game, with gaining 6 different ranks inspired by ranks used in League of Legends, containing iron, bronze, silver, gold, platinum, diamond, master, grandmaster and the challenger tier. Under these ranks players can achieve sub-ranks that are numbered from 1 to 4 (only ranks from iron to diamond). Once the player hits the highest sub-rank, the player is moved to the next highest rank.

Source: own processing

Chess Rush (Tencent)

Chess Rush by chinese game gigant Tencent uses the same mechanics as other auto chess/auto battler games including chessboard, shopping phase, items used for players champions, game flow or other rules. Graphic design of the games is more colourful as it's common in games made for the chinese market.

Board	Uses the same chessboard as traditional Chess uses. Players use only 4x8 rows of tiles from 8x8 available on the chessboard. Other half of the chessboard is used by various monsters or enemy players in symmetric multiplayer mode. Which is the same as for mostly all other auto battler games.
Items	This auto battler game shares most of the mechanics as the previous games. Items can be used for champions, which gives them abilities.
Time	This variation of auto battler puts 8 players together into a match which is 2 less than in Dota Auto Chess or Dota Underlords or Teamfight Tactics. Waves of monsters and battling phases remain the same.
Conditions	Game mechanics aren't changed and work exactly the same as other auto battler games. Last man standing is the winner. Player who loses all hit points dies and cannot participate in the match anymore.
Start	Player starts the game with 1 gold which may be used for buying his first champion. Every following round player gets passive income. Gold can be used for buying new champions or increasing a player's experience level that indicates how many champions he or she can have on the chess board. This is also the same as before in Dota Auto Chess mode.
Characters	Champions used in this game are quite similar as some League of Legends and Dota 2 champions, but their names are different. The mechanics of merging and levelling up remains the same as for Dota Auto Chess.

Meta	There are two modes in Chess Rush. Turbo Mode that reduces 40-minute play time into a mere 10 minutes. It achieves this by reducing your health and increasing the mana you gain each round. The result is a much faster-paced experience that doesn't actually compromise the gameplay. It's the exact same experience, just faster. So all of the strategies players developed so far will still work.[65] Co-op mode will take four teams of two and allow them to battle it out on the board for supremacy. To make things even more interesting Tencent is launching another update for Co-op mode on August 15th that will bump those two-person teams to four, making for a more intense match as it'll be 4v4 instead of 2v2.[66]

Source: own processing

Other Smaller Auto Battlers

Currently, we can see various 'auto chess-like' games on the google app store and app store for iPhones. At this time thousands of players are playing auto battler games every day. All the games share the same or mostly the same mechanics of the auto battler. We can find some auto battler games in the Google Play Store such as Magic chess bang with more than one million downloads by kaka games, Tactical monsters rumble arena with more than one million downloads, Arena of evolution with more than 500 000 downloads, *Heroes Auto Chess*[67] with 100,000 downloads, or games such as *Auto Chess War*[68] or *Heroes of Chess*[69].

Discourse: Rise of Auto Battlers

Since the usage of the Steam platform, we focused primarily on the reports from this platform for games like Dota Underlords and an original custom game Dota Auto Chess. This game can be played through Dota 2 Arcade (Custom games.). The most popular games can be filtered in the arcade browse menu. We can see 10 of the most popular custom or arcade games for this week. The number of 'playing now' is variable that is changing quickly so we decided to identify the numbers of subscribers to individual custom games sorted by the most popular. The most popular game of the week is custom game called *Custom Hero Chaos* (summoner online) with 1,021,579 subscriptions, the second most popular is Dota Auto Chess with 9,736,327 (these numbers are not correct??) subscriptions, other games in the filtered view have around one million subscribers, but the game called Overthrow 2.0 is the only one that has more than 3 million subscribers. If we filter games as TOP rated (all time) then Dota Auto Chess is at the moment in the first

80 games of 4,000. We found in over 80 games only 2 games that had more than 4 million subscribers which was *Touhou Avatar Dream Battle* and *Skillshot Wars*, and only one game that had more subscribers than Dota Auto Chess which was Overthrow with more than 10 million subscribers. Overthrow is a game mod created by Dota 2 Official in 2015. These numbers show that Dota Auto Chess is one of the most successful game mods created for Dota 2 games.[70]

Dota Underlords was released in June 2019 for Steam and also mobile devices with Android and iOS made by Valve. On Steam Spy we found that 10 million users own this title. On Steam players may use tags alongside developers and moderators as we mentioned before. Dota Underlords was 344 times tagged as an auto battler alongside tags such as free-to-play, strategy, casual or tactical.[71] On the Android store we can find this game in strategy, tactics, offline, single player and stylised categories, but if we look at the 'about' we can find in the description that Dota Underlords is a 'strategy battler' or also an 'auto battler'.[72] Teamfight Tactics made by Riot Games do not have much official public data for their games since Teamfight Tactics is running under the Riot games client. Various pages indicate that Teamfight Tactics has 33 million of players monthly.[73] Teamfight Tactics can be also found on Google Play Store and on App Store, but currently it's still in the beta version. The name of the game contains 'strategy game' but in the description of the game the developers call it also an auto battler.[74] For other auto battlers downloadable via App Store or Google Play Store there exist only numbers of downloads which are more than 5 million.

The popularity of auto battler games can be seen also on various sites which are used for community tournaments such as 5v5 or 1v1 mod for League of Legends, Dota 2 or other famous games. Since the rise of popularity of auto battlers there exist tournaments for these games, even though these games were still in beta versions at the end of 2019. On the site Battlefy we can find tens of Teamfight Tactics tournaments[75] or also for Dota Underlords on ESL Play.[76] These community events are sponsored mostly from private sponsors, but for Auto Chess Mobile they made an immense tournament based in China with a prize pool worth 1 million dollars. We could also track some events that made an impact on the growth of auto battler games. The first big impact made was the release date of Dota Auto Chess on January 4th 2019[77] when searches started to increase in google trends. The next thing happened a week later on January 11th when subreddit Auto Chess was created on the Reddit site,[78] where a lot of gamers can comment, ask or give advice. On January 14th, we tracked an article talking about auto chess popularity around players on Kotaku.[79] On February 10th a subreddit of the Auto Chess Mobile game was created.[80] Following this trend on May 8th, 2019 a subreddit about Teamfight Tactics[81] was created

65   *Chess Rush Review – Turbo Mode Makes All the Difference*. [online]. [2020-04-12]. Available at: <https://www.droidgamers.com/2019/07/06/chess-rush-review-turbo-mode-makes-all-the-difference/>.
66   *Co-op Mode Is Now Live in Chess Rush, Additional Mode Coming*. [online]. [2020-04-12]. Available at: <https://www.androidheadlines.com/2019/08/co-op-mode-is-now-live-in-chess-rush-additional-mode-coming.html>.
67   *Heroes Auto Chess – Free RPG Chess Game*. [online]. [2020-04-12]. Available at: <https://play.google.com/store/apps/details?id=com.onetongames.hac&hl=en_US>.
68   *Auto chess War*. [online]. [2020-04-12]. Available at: <https://play.google.com/store/apps/details?id=com.phoenix.autochess&hl=en_US>.
69   *Heroes of Chess (Early Access)*. [online]. [2020-04-12]. Available at: <https://play.google.com/store/apps/details?id=com.stegobubbles.heroesofchess&hl=en_US>.

70   Remark by the authors: All these informations shown, such as subscribers, names of the custom (or arcade) games can be find in Dota 2 game under the Arcade subpage in menu.
71   *Dota Underlords*. [online]. [2020-04-02.]. Available at: <https://steamspy.com/app/1046930>.
72   *Dota Underlords – Google Play*. [online]. [2020-04.02]. Available at: <https://play.google.com/store/apps/details?id=com.valvesoftware.underlords&hl=sk>.
73   *Teamfight Tactics has 33 million players a month*. [online]. [2020-04-03]. Available at: <https://www.pcgamesn.com/teamfight-tactics/player-count>.
74   *Teamfight Tactics: League of Legends Strategy Game*. [online]. [2020-04-03]. Available at: <https://play.google.com/store/apps/details?id=com.riotgames.league.teamfighttactics&hl=sk>.
75   *Showing tournaments for teamfight tactics*. [online]. [2020-04-03]. Available at: <https://battlefy.com/search/tournaments/game/teamfight-tactics/>.
76   *Dota Underlords global*. [online]. [2020-04-03]. Available at: <https://play.eslgaming.com/dotaunderlords/global/>.
77   TACK, D.: *What Is Dota Auto Chess and Why Is Everyone Playing It?*. [online]. [2020-04-04]. Available at: <https://www.gameinformer.com/2019/01/14/what-is-dota-auto-chess-and-why-is-everyone-playing-it>.
78   *AutoChess*. [online]. [2020-04-04]. Available at: <https://www.reddit.com/r/AutoChess/>.
79   GRAYSON, N.: *Dota 2 Custom Mode Is Either One of Steam's Top Games Or A Glitch*. [online]. [2020-04-04]. Available at: <https://kotaku.com/dota-2-custom-mode-is-either-one-of-steams-top-games-or-1831749731>.
80   *AutoChess Mobile*. [online]. [2020-04-05]. Available at: <https://www.reddit.com/r/AutoChessMobile/>.
81   *Teamfight Tactics*. [online]. [2020-04-05]. Available at: <https://www.reddit.com/r/TeamfightTactics/>.

also and on May 10th, 2019 a subreddit about Dota Underlords.[82] Dota Underlords was released on June 20th.[83] On the 25th of June a Kotaku article named auto chess as a new game genre. May 26th was the date when Teamfight Tactics was released.[84] A WCCFTECH article about Tencent releasing the auto battler game Chess Rush was made public on July 3rd.[85] On July 10th, a separate article was created on Wikipedia about auto battlers.[86] An article about auto battlers on rock paper shotgun was published on August 1st, 2019,[87] and on August 22nd was added to Wikipedia auto battler as a strategy game videogame subgenre.[88] Right now, if we google search Teamfight Tactics, Auto Chess or Dota Underlords google offers us a quick overview and we can see that all these games have their genre as auto battler. For now Tencents Chess Rush doesn't have any genre assigned to it.

Auto battlers are free to play games which may also be the reason why they became so popular, although all these games offer some kind of purchases such as microtransactions or battle passes for seasons. These passes and transactions for changes of looks of avatars or chess boards or even some effects so far do not allow anyone to 'pay to win'.

Conclusion

To discuss whether some new class of media is a genre, we had to dive into genre theory, and the reasons why we use genres in the first place. We concluded that discussions about genre have two distinctive approaches – one oriented more on the content of the medium and the other more on the social discourse surrounding the medium. This distinction is not strict though, and we used it more as a guide to create four key features of the new genre in digital games. The first two are content based, and they focus on the similarities and differences in the mechanics of the games. The second two are based on discourse, which can serve a social, or a commercial purpose. These two purposes work in harmony with each other, and by reviewing the games mechanics and tracking the most popular and trendsetting pages, we can prove or disprove if there a new genre is imminent.
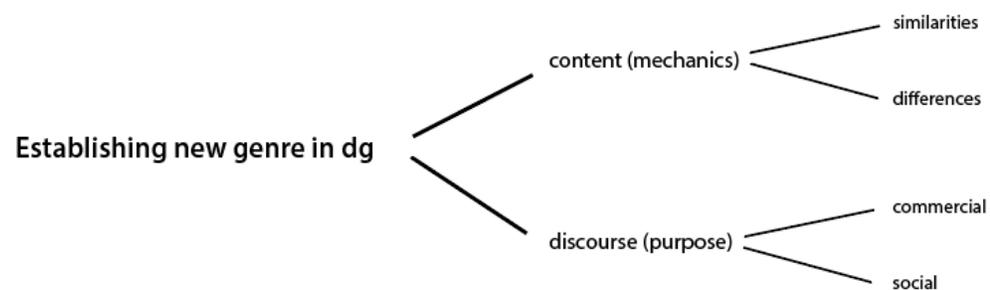

Picture 1: Conditions of new genres in digital games.
Source: own processing

82   *Dota Underlords on Reddit*. [online]. [2020-04-05]. Available at: <https://www.reddit.com/r/underlords/>.
83   *Dota Underlords*. [online]. [2020-04-05]. Available at: <https://store.steampowered.com/app/1046930/Dota_Underlords/>.
84   GRAYSON, N.: *A Guide to Auto Chess, 2019's Most Popular New Game Genre*. [online]. [2020-04-05]. Available at: <https://kotaku.com/a-guide-to-auto-chess-2019-s-most-popular-new-game-gen-1835820155>.
85   GANTI, A.: *Tencent Gets in on the Auto Chess Bandwagon With a Game Called Chess Rush*. [online]. [2020-04-06]. Available at: <https://wccftech.com/tencent-auto-chess-rush/>.
86   *Auto battler*. [online]. [2020-04-06]. Available at: <https://en.wikipedia.org/wiki/Auto_battler>.
87   COX, M.: *Spawn Point: What on earth is an auto battler?*. [online]. [2020-04-06]. Available at: <https://www.rockpapershotgun.com/2019/08/01/what-is-an-auto-battler/>.
88   *Strategy video game*. [online]. [2020-04-06]. Available at: <https://en.wikipedia.org/wiki/Strategy_video_game>.

For our analysis, we selected the class of games called auto battler (at the beginning called auto chess), to show how this can be done. We selected these games, because they are some of the newest digital game classes of recent years, and also because they work as a great example of the role of participatory culture in digital games. We examined several of the most popular games in this category. First, we searched for similarities and we showed that we can find at least 7 core game mechanics that can be considered crucial for a game to be called an auto battler. Then we made small case studies of these games and showed the minor differences in 7 categories based on the core mechanics to show how these games differ in details based on gameplay, and therefore they cannot be considered clones. As we pointed out in previous chapters, the concept of core mechanics and minor ones is somewhat fluid. Therefore, we will not provide any table of conditions, or some other 'simple solution' based on visualisation. If we want to discuss content in relation to game genre, we cannot rely on simplifications; we need to use language, in the form of one paragraph:

The auto battler class shares the same core mechanics for board, items, time, winning/losing conditions, start, characters and meta. All auto battlers we tested have in common phases where players start with some amount of hitpoints, duel each other and then fight until the last player remains. In all auto battlers we can find the same mechanics of 'buying', 'deploying', 'levelling up the champions' or avatar. The minor differences can be found in the avatar for Dota Underlords which fights alongside the champions, Teamfight Tactics, which uses a hexagonal instead of square 'chessboard' and uses a 'carousel' round for players to pick new champions with item on them, or auto battlers for smartphones which have some kind of 'turbo mode' for quicker gameplay. From the discursive perspective, we showed how the first of the games became popular in several weeks. The first subreddit dedicated to Auto Chess appeared just four days after the game release, and most other researched games had subreddits created even before they were released. More importantly, only half a year after releasing the first game (and with only four games/mods out in total) journalists started to call this new type of games a genre, and an article about Auto Chess appeared on Wikipedia. We can also see how tags on Steam started to appear, and now we can find more and more games marked with the label auto chess in the store. With its monetary free-to-play model, most of the games are no doubt a commercial product also. This timeline shows how the discourse surrounding the new class evolved.
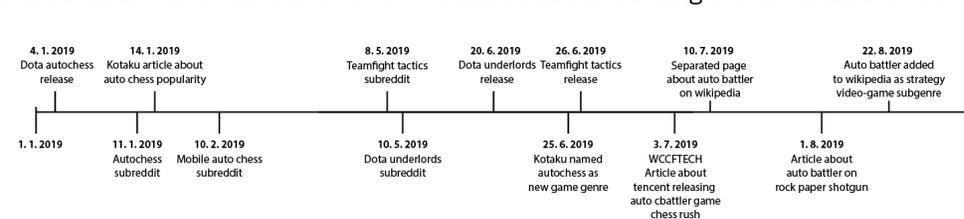
Picture 2: Auto Battler appearance timeline
Source: own processing

Based on these notes, we can conclude that auto battlers are a new genre. A genre that proves, in digital games, the role of participatory culture is much more important, as it can not only create new particular contents, but also totally new and unexpected forms or classes, such as genres. The aim of this paper is to widen the discussions about game genres. We argue that there are no 'shortcuts' to truly understand how they function. We have to get rid of rigid criteria or deeply abstract constructs. Genre, just as any other category has a base in objective properties, but the meaning only becomes clear within the culture.

BIBLIOGRAPHY

AARSETH, E.: *Cybertext: Perspectives on Ergodic Literature*. Baltimore : The Johns Hopkins University Press, 1997.

AARSETH, E., SMEDSTAD, S. M., SUNNANÅ, L.: A Multidimensional Typology of Games. In RAESSENS, J., COPIER, M., GOLDSTIN, J., MÄYRÄ, F. (eds.): *DiGRA '03 – Proceedings of the 2003 DiGRA International Conference: Level Up*. Utrecht : Digital Games Research Association, 2003, p. 48-53.

ALTMAN, R.: *Film/Genre*. London : British Film Institute, 1999.

APPERLEY, T. H.: Genre and game studies: Toward a critical approach to video game genres. In *Simulation & Gaming*, 2006, Vol. 37, No. 1, p. 6-23. ISSN 1046-8781.

ARISTOTLE: *Poetics*. Cambridge : Harvard University Press, 1995.

ARSENAULT, D.: Video Game Genre, Evolution and Innovation. In *Journal for Computer Game Culture*, 2009, Vol. 3, No. 2, p. 149-176. ISSN 1866-6124. [online]. [2020-04-04]. Available at: <https://www.eludamos.org/index.php/eludamos/article/view/vol3no2-3>.

Auto battler. [online]. [2020-04-06]. Available at: <https://en.wikipedia.org/wiki/Auto_battler>.

AutochessWar. [online]. [2020-04-12]. Available at: <https://play.google.com/store/apps/details?id=com.phoenix.autochess&hl=en_US>.

AutoChess. [online]. [2020-04-04]. Available at: <https://www.reddit.com/r/AutoChess/>.

AutoChess Mobile. [online]. [2020-04-05]. Available at: <https://www.reddit.com/r/AutoChess Mobile/>.

BAKHTIN, M.: *Speech Genres and Other Late Essays*. Austin : University of Texas, 1986.

BLIZZARD ENTERTAINMENT: *Heroes of the Storm*. [digital game]. Irvine : Blizzard Entertainment, 2015.

BLIZZARD ENTERTAINMENT: *StarCraft*. [digital game]. Irvine : Blizzard Entertainment, 1998.

BLIZZARD ENTERTAINMENT: *Warcraft III: Reign of Chaos*. [digital game]. Irvine : Blizzard Entertainment, 2003.

BLIZZARD ENTERTAINMENT: *World of Warcraft*. [digital game]. Irvine : Blizzard Entertainment, 2004.

BOHEMIA INTERACTIVE: *ARMA 2*. [digital game]. Prague : Bohemia Interactive, 2009.

BUČKOVÁ, Z.: Typology of Game Principles in Digital Games: A Case Study of Mafia III. In *Acta Ludologica*, 2019, Vol. 2, No. 1, p. 42-54. ISSN 2585-8599.

CAILLOIS, R.: *Man, Play, and Games*. Chicago : University of Illinois Press, 2001.

CD PROJEKT RED: *The Witcher*. [digital game]. New York : Atari, 2007.

CLEARWATER, D. A.: What Defines Video Game Genre? Thinking about Genre Study after the Great Divide. In *Loading…*, 2011, Vol. 5, No. 1, p. 29-49. ISSN 1923-2691. [online]. [2020-04-04]. Available at: <http://journals.sfu.ca/loading/index.php/loading/article/view/67/105>.

COHEN, R.: History and Genre. In *New Literary History*, 1986, Vol. 17, No. 2, p. 203-218. ISSN 0028-6087.

COLBY, Ch.: *Introduction to Evolutionary Biology*. [online]. [2020-03-20]. Available at: <http://www.talkorigins.org/faqs/faq-intro-to-biology.html>.

CONSALVO, M., DUTTON, N.: Game analysis: Developing a methodological toolkit for the qualitative study of games. In *Game Studies*, 2006, Vol. 6, No. 1. ISSN 1604-7982. [online]. [2020-03-20]. Available at: <http://gamestudies.org/06010601/articles/consalvo_dutton#app1>.

Co-op Mode Is Now Live in Chess Rush, Additional Mode Coming. [online]. [2020-04-12]. Available at: <https://www.androidheadlines.com/2019/08/co-op-mode-is-now-live-in-chess-rush-additional-mode-coming.html>.

COX, M.: *Spawn Point: What on earth is an auto battler?*. [online]. [2020-04-06]. Available at: <https://www.rockpapershotgun.com/2019/08/01/what-is-an-auto-battler/>.

DERRIDA, J., RONELL, A.: The Law of Genre. In *Critical Inquiry*, 1980, Vol. 7, No. 4, p. 55-81. ISSN 0093-1896.

Development Log: Quick Mode. [online]. [2020-04-12]. Available at: <https://ac.dragonest.com/en/news/detail/e5b6992e4b9>.

DEVITT, A. J.: Generalizing about Genre: New Conceptions of an Old Concept. In *College Composition and Communication*, 1993, Vol. 44, No. 4, p. 573-586. ISSN 0010-096X.

Dota Underlords. [online]. [2020-04-05]. Available at: <https://store.steampowered.com/app/1046930/Dota_Underlords/>.

Dota Underlords. [online]. [2020-04-07]. Available at: <https://steamspy.com/app/1046930>.

Dota Underlords – Google Play. [online]. [2020-04.02]. Available at: <https://play.google.com/store/apps/details?id=com.valvesoftware.underlords&hl=sk>

Dota Underlords global. [online]. [2020-04-03]. Available at: <https://play.eslgaming.com/dotaunderlords/global>.

Dota Underlords on Reddit. [online]. [2020-04-05]. Available at: <https://www.reddit.com/r/underlords/>.

FORTANET, I., PALMER, J. C., POSTEGULIO, S.: The Emergence of a New Genre: Advertising on the Internet (netvertising). In *Hermes, Journal of Linguistics*, 1999, Vol. 23, No. 1, p. 93-113. ISSN 0904-1699. [online]. [2020-04-21]. Available at: <https://tidsskrift.dk/her/article/view/25551/22464>.

GAME FREAK: *Pokémon Blue*. [digital game]. Kyoto : Nintendo, 1996.

GAME FREAK: *Pokémon Red*. [digital game]. Kyoto : Nintendo, 1996.

GANTI, A.: *Tencent Gets in on the Auto Chess Bandwagon With a Game Called Chess Rush*. [online]. [2020-04-06]. Available at: <https://wccftech.com/tencent-auto-chess-rush/>.

GOSLIN, A.: *Which auto battler should you play: Teamfight Tactics, Underlords, or Dota 2 Auto Chess*. [online]. [2020-04-14]. Available at: <https://www.polygon.com/2019/6/27/18759592/auto-battler-teamfight-tactics-underlords-dota-2-auto-chess-differences>.

GRAYSON, N.: *A Guide to Auto Chess, 2019's Most Popular New Game Genre*. [online]. [2020-04-05]. Available at: <https://kotaku.com/a-guide-to-auto-chess-2019-s-most-popular-new-game-gen-1835820155>.

GRAYSON, N.: *Dota 2 Custom Mode Is Either One of Steam's Top Games Or A Glitch*. [online]. [2020-04-04]. Available at: <https://kotaku.com/dota-2-custom-mode-is-either-one-of-steams-top-games-or-1831749731>.

Heroes Auto Chess – Free RPG Chess Game. [online]. [2020-04-12]. Available at: <https://play.google.com/store/apps/details?id=com.onetongames.hac&hl=en_US>.

Heroes of Chess (Early Access). [online]. [2020-04-12]. Available at: <https://play.google.com/store/apps/details?id=com.stegobubbles.heroesofchess&hl=en_US>.

HOORN, J. F.: How is a Genre Created? Five Combinatory Hypotheses. In *Comparative Literature and Culture*, 2000, Vol. 2, No. 2, p. 1-9. ISSN 1481-4374. [online]. [2020-04-21]. Available at: <https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1070&context=clcweb>.

HUNICKE, R., LEBLANC, M., ZUBEK, R.: *MDA: A Formal Approach to Game Design and Game Research*. [online]. [2020-04-21]. Available at: <https://www.researchgate.net/publication/228884866_MDA_A_Formal_Approach_to_Game_Design_and_Game_Research>.

Chess Rush Review – Turbo Mode Makes All the Difference. [online]. [2020-04-12]. Available at: <https://www.droidgamers.com/2019/07/06/chess-rush-review-turbo-mode-makes-all-the-difference/>.

Introduction of Auto Chess. [online]. [2020-04-12]. Available at: <https://ac.dragonest.com/en/gameIntroduction>.

Items. [online]. [2020-01-12] Available at: <https://dotaautochess.gamepedia.com/Items>.

JAUSS, H. R.: *Toward an Aesthetic of Reception*. Minneapolis : University of Minnesota Press, 1982.

KONZACK, L.: Computer Game Criticism: A Method for Computer Game Analysis. In MÄYRÄ, F. (ed.): *Proceedings of Computer Games and Digital Cultures Conference*. Tampere : Tampere University Press, 2002, p. 89-100.

LEE, H. J. et al.: Facet Analysis of Video Game Genres. In KINDLING, M., GREIFENEDER, E. (eds.): *iConference 2014 Proceedings*. Illinois : iSchools, 2014, p. 125-139. [online]. [2020-03-27]. Available at: <https://www.ideals.illinois.edu/bitstream/handle/2142/47323/057_ready.pdf?sequence=2&isAllowed=y>.

MALIET, S.: Adapting the Principles of Ludology to the Method of Video Game Content Analysis. In *Game Studies*, 2007, Vol. 7, No. 1. ISSN 1604-7982. [online]. [2020-04-26]. Available at: <http://gamestudies.org/0701/articles/malliet>.

MOBA. [online]. [2020-03-15]. Available at: <https://trends.google.com/trends/explore?date=all&q=MOBA>.

NAMCO: *Pac-Man*. [digital game]. Tokyo : Namco, 1980.

NUTT, Ch.: *The Valve Way: Gabe Newell and Erik Johnson Speak*. [online]. [2020-01-15]. Available at: <https://www.gamasutra.com/view/feature/6471/the_valve_way_gabe_newell_and_.php?page=3>.

Popular brands. [online]. [2020-04-13]. Available at: <https://store.steampowered.com/tag/browse/#global_492>.

Ranked. [online]. [2020-04-06] Available at: <https://dotaunderlords.gamepedia.com/Ranked>.

RIOT GAMES: *League of Legends*. [digital game]. Los Angeles : Riot Games, 2009.

S2 GAMES, FROSTBURN STUDIOS: *Heroes of Newerth*. [digital game]. Singapore : Frostburn Studios, 2010.

Showing tournaments for teamfight tactics. [online]. [2020-04-03]. Available at: <https://battlefy.com/search/tournaments/game/teamfight-tactics/>.

SOTAMAA, O.: When the Game Is Not Enough: Motivations and Practices Among Computer Game Modding Culture. In *Games and Culture*, 2010, Vol. 5, No. 3, p. 239-255. ISSN 1555-4120.

Steam tags. [online] [2020-04-04]. Available at: <https://partner.steamgames.com/doc/store/tags>.

Store. [online]. [2020-04-13]. Available at: <https://store.steampowered.com/>.

Strategy video game. [online]. [2020-04-06]. Available at: <https://en.wikipedia.org/wiki/Strategy_video_game>.

SUPERHOT TEAM: *Superhot*. [digital game]. Lodz : Superhot Team, 2016.

TACK, D.: *What Is Dota Auto Chess and Why Is Everyone Playing It?*. [online]. [2020-04-04]. Available at: <https://www.gameinformer.com/2019/01/14/what-is-dota-auto-chess-and-why-is-everyone-playing-it>.

Teamfight Tactics. [online]. [2020-04-05]. Available at: <https://www.reddit.com/r/TeamfightTactics/>.

Teamfight Tactics has 33 million players a month. [online]. [2020-04-03]. Available at: <https://www.pcgamesn.com/teamfight-tactics/player-count>.

Teamfight Tactics: *League of Legends Strategy Game*. [online]. [2020-04-03]. Available at: <https://play.google.com/store/apps/details?id=com.riotgames.league.teamfighttactics&hl=sk>.

VALVE: *Dota 2*. [digital game]. Bellevue : Valve, 2013.

WOLF, M. J. P.: *The medium of the video game*. Texas : University of Texas Press, 2002.

Romero Eternal

Interview with John ROMERO

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John Romero is a Mexican and Native American designer, programmer, and developer in the digital-gaming industry and a co-founder of 10 game studios, including id Software and Ion Storm. He is the author of dozens of games, among others the iconic titles, which started world-famous game series like Wolfenstein 3D, Doom, and Quake, and significantly formed the modern concept of the first-person shooter (FPS) genre, leading to its mass popularization in the 1990s. He also came up with the term 'deathmatch', concerning FPS multiplayer. In 2010, he acted as guest editor for the gaming magazine Retro Gamer. Currently, he is working in Romero Games, a multi-award-winning AAA game studio based in Galway, Ireland.

Interviewer

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Zdenko Mago is an assistant professor at the Faculty of Mass Media Communication at the University of Ss. Cyril and Methodius in Trnava, Slovakia. He particularly focuses on interconnections between games studies and marketing communication. In 2014 and 2017, he was a program committee member of the international scientific conference Central and Eastern European Games Studies. At the beginning of 2018, he acted as a visiting researcher at Ritsumeikan University in Kyoto, Japan. Currently he is editor-in-chief of the scientific journal Acta Ludologica.

Zdenko Mago (Z. M.): People usually know you as an iconic game developer particularly thanks to Doom, but which of your games is truly your most favourite?

John Romero: Doom is my favourite. Next to Doom would be Quake. In general, I really love the Ghost Recon series. Currently, Ghost Recon Breakpoint is my favourite. My favourite indie game at the moment is A Short Hike.

Z. M.: Many of your successful games after Doom, like Heretic, Quake, Daikatana as well as Doom's sequels and versions, were based on violence and gore. How were you and did you become so certain even about Doom, that violent games with gore effects were the way to success?

John Romero: The answer was simple: that's the kind of game that I liked myself. I played and made games for 13 years before making Doom. I used to draw gory comics in the early 80's, and frequently drew violent things. It was natural for me.

Z. M.: Doom was officially released on December 10, 1993, the day after the first congressional hearing on violence in digital games and its impact. Since Doom is considered an icon regarding violent digital games even until today, what were your feelings related to Doom's fate before and after that hearing? Did you ever think about or did you have a plan about what kind of games you would make if violence in digital games was banned?

John Romero: I never thought about the possibility that I could be stopped from making violent games. Movies and books were violent, so I saw no reason why games couldn't be violent as well. I didn't pay attention to what was happening in Congress as I was too busy making the game, so I didn't know it was happening.

Z. M.: In the early stages of Doom development, did you ever consider that the Doom Marine (also Doomguy or Doom Slayer) could be female?

John Romero: At the time we didn't consider it – we thought of the player as a Rambo-like character, but named the character Doomguy since multiplayer mode meant anyone could be that character. We never thought of including a female avatar because our idea of a space marine was male, and games rarely had female avatars back then.

Z. M.: Have you ever been concerned about the potentially negative effects of your games?

John Romero: We really didn't think about the effects of our games except for our players really liking them. I don't make games that make me worry about the negative effects on players because I don't design games to harm my audience. My kids loved playing Doom for the first time when they were 8 years old.

Z. M.: Both gamers and critics have been rating modern remakes of your first-person shooters pretty highly. How do you personally rate the shift of Wolfenstein and the Doom series? Why did you not participate in their development?

John Romero: I think id Software, Bethesda Softworks and MachineGames have done a great job on the modern sequels/remakes of my games. I didn't work on them because I'm

not employed by them anymore, and no one asked for my help. If they did, it would depend on the work situation. If I had to move back to the United States to work on a game with id Software, I wouldn't do it. I love Ireland and I'm staying here. If I could work from Ireland, I would probably be okay with that. However, I'm really busy with my own games right now, so the timing would have to be right.

Z. M.: An interesting fact is that the remakes were released in the same order you created the original games (first Wolfenstein, then Doom). Following that logic, Quake is next. What do you think it will be like?

John Romero: The most recent sequels released were Wolfenstein: The New Order (2014), Wolfenstein: The Old Blood (2015), Doom (2016), Wolfenstein II: The New Colossus (2017), Quake Champions (2018), Wolfenstein: Youngblood and Wolfenstein: Cyberpilot (2019), then Doom Eternal (2020). I hope the next Quake game goes back to the original H. P. Lovecraft style, and is a single-player FPS. The original Quake had a unique design. When id Software made Quake II, they threw out the original setting and basic ideas and made a totally different game that was closer to Doom than Quake with biomechanical characters, enemies that were military troops, and a far more military-themed game.

Z. M.: Have you ever thought about developing a modern remake of any of your games by yourself?

John Romero: I remade my 1990 game, Dangerous Dave, in 2015 for iOS. I'm currently working on a desktop and Android version of Dangerous Dave that I will release in 2020. I might have some other remakes or re-releases of prior games in the works, but those are side projects. My main projects are always new games.

Z. M.: Your newest project, Empire of Sin, is one of the most highly anticipated games of 2020. However, it's quite a deviation from your previous work. Is this an indication of your future development direction?

John Romero: My wife, Brenda Romero, is the lead designer of Empire of Sin. The game is her idea and inspiration. I work on the game as well, but she's the Game Director and makes all the decisions about it. I can't say whether Empire of Sin is an indication of my future games because I've traditionally worked in several genres.

Z. M.: Currently, game studies are progressing and developing considerably in the academic world. Do you think studying games is important? Do you have any advice for game studies' students?

John Romero: The study of games is of critical importance to becoming a great game designer, even if that study has other benefits outside the game itself. Understanding how a game works is very different from understanding why a game works. Focus on the "why" and you will learn more about why we play games, and like certain ones more than others.
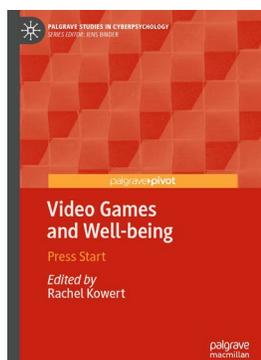
VIDEO GAMES AND WELL-BEING

KOWERT, R. (ed.): *Video Games and Well-being. Press Start*. Cham, Switzerland : Springer Nature Switzerland AG, 2020. 166 p. ISBN 978-3-030-32770-5.

Kateryna Nykytchenko

Playing video games has become part and parcel of our lives. An average person spends around six hours a week[1] playing online or offline on a phone, tablet, or TV. Furthermore, such consoles as PS4 and Xbox are on everybody's A-list. Even though video games seem to be ubiquitous, the word "video game", or "gamer", is traditionally conceived rather as a potential peril covering addiction, seclusion, depression, and violence. The book is focused on debunking this myth that has grown up around video games shedding light on their nature, which are "not "good" or "bad" – they follow the design and intentions of their producers as well as the use of the gamers" (p. 15). Hence being the tool, video gaming can redound (?) to our psychological well-being. This book fosters the largely unexplored psychological benefits of gaming and advances our understanding of the positive effects of video games on our mental health by helping to reduce stress, mitigate anxiety and escape from interpersonal problems. The chapters in this volume are written by leading researchers in the field of game studies and integrate insights from academia, psychology, the video gaming industry, online communication, and mental health practices. The editor of the book Rachel Kowert is a research psychologist who has been studying video game effects over the past ten years and concomitantly she is the Research Director of the US mental health organization "Take This" that provides information to the gaming industry. It all contributes to the feeling that the book is written based on hands-on experience.

The book consists of eleven chapters and a foreword. Rather than being a theoretical work on video games, the volume can be considered as guidance for both children and adults that shows how game play can boost psychological well-being by teaching skills associated with happiness and life satisfaction, namely self-realization, personal growth, solution-focused thinking, mindfulness, resilience, and positive interpersonal relationships. By the same token, multiple vivid examples and life situations are interspersed throughout the book. In the first chapter, the author substantiates the need for changing the presumption about negative outcomes of game play, espousing the inevitable link to three types of well-being: hedonic, eudemonic, and social. The second chapter, entitled 'Press Reset', immerses the reader into another perspective on gaming as a tool helping to overcome behavioural barriers. In an attempt to elaborate on the impact of in-game decisions on real-world actions, the research is substantiated by a number of experiment results. In the following section of the book 'Explore the Map' the author draws a parallel vis-à-vis the real world again: "in a game, the map can lead to cool armor and treasure" (p. 39) whilst in the real world "to a life where the person is more open to try new experiences" (p. 39). What is seemingly the most insignificant in game play is brought into focus here, which is another strong point of the book. Thus, for instance, your avatar, through

which you interact and participate in virtual activities, turns out to be a marker of identity. Hereby, the author gives practical pieces of advice on how to develop new skills through the avatars we play. One of them is to play a character radically different from yourself (p. 61). Interested why? Grab the book and find out!

The next chapter examines how feedback provides the foundation for a growth mindset. Based on that, chapter six addresses a solution-finding approach in order to understand our strengths and improve our well-being, in particular our resilience, by using video games, which is logically connected to chapter five as there is no growth without challenge. The following section of the book, including chapters seven to ten, deals with specific facets of well-being. Chapter seven explores mindfulness as a method of improving well-being in close connection with flow, the state of mind one achieves when completely absorbed in game play. The research conducted shows that a great number of video games induce flow and the latter in its own way can lead to mindfulness. At the same time, games such as Playne improve mindfulness straight away, being initially developed to serve this goal. In addition to the above mentioned skills, authors also speculate how solving in-game puzzles, such as defeating a Lynel in Breath of the Wild or beating Super Mario Brothers 3, and overcoming cognitive dissonance within a hard game can transfer to even more difficult challenges in real life. For better understanding the author raises the question: What is the secret to persisting through seemingly insurmountable challenges?

The focus of the next two chapters is persistence as a key correlate with life-satisfaction and happiness that is with our well-being. Chapter nine examines how the narratives of the stories can facilitate persistence through the Hero's Journey. While role-paying this journey, through iterative processes of trying, failing, and trying again players can gain a new skill without any repercussions or adversity as exists in the real world. Chapter ten 'Extra Lives' delved deeper into the benefits of video games so long as they provide the opportunity to experience fictional trauma events. In this way, video games give the chance to explore our own vulnerabilities. Moreover, this chapter pinpoints factors of resilience in overcoming posttraumatic reactions. The last, eleventh, chapter contains concluding comments and summarizes the main points of the book. This may be perhaps the least exciting part of any book, but here, on the contrary, it deserves precise attention and gives you an overall view of the structure of the book. If there is any weakness in the book, it may be the impression that the book is just a set of separate articles, though it is the last chapter which sorts it out. Taken together, the book 'Video Games and Well-being' is a reaction to numerous admonitions that video games are making players aggressive, violent and anti-social. But, as the author himself states, instead of looking for flaws in "a remarkable feat of human innovation, we can show a healthy and constructive utility of gaming, the benefits of which are unique and plentiful" (p. 90). If you are a staunch and longtime devotee of video gaming, or an indefatigable educator who has taken up the gauntlet to prioritize kids' well-being, in this regard the book is worthwhile reading as it provides you with a solid understanding how video games can help us grow, learn, thrive, and acquire new skills. It is a must-read book for parents who are perturbed with their children being confirmed gamers. "Instead of descending into a moral panic about screens, digital content, and online interaction" (p. vi) take the book and learn how to implicitly turn a game into a tool to achieve your goals. Last but not least, the book should be considered a good choice for game developers who want to understand how to entice people into buying a brand-new game and at the same time to push up the value of it.

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1   For more information, see: *The state of Online Gaming – 2018*. *Market Research.* [online]. [2020-03-22]. Available at: <https://www.limelight.com/resources/white-paper/state-of-online-gaming-2018/>.

BIBLIOGRAPHY

The state of Online Gaming – 2018. *Market Research*. [online]. [2020-03-22]. Available at: <https://www.limelight.com/resources/white-paper/state-of-online-gaming-2018/>.

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DETROIT: BECOME HUMAN

QUANTIC DREAM: *Detroit: Become Human (PlayStation 4 version)*. [digital game]. Tokyo, San Mateo, CA : Sony Interactive Entertainment, 2018.

Łukasz P. Wojciechowski

"I've learned a lot since I met you, Connor. Maybe there's something to this... Maybe you really are alive. Maybe you'll be the ones to make the world a better place... Go ahead, and do what you gotta do." Hank Anderson, police lieutenant (human) works with his partner, Connor (android).

Detroit: Become Human by author David Cage is a third-person adventure, similar to the previous games from the studio *Quantic Dream*[1], *Heavy Rain*[2] or *Beyond: Two Souls*[3]. And, just like the previous ones, they put a strong emphasis on ramifications of the story, choosing replicas of dialogues or emotional settings, which significantly affect the story and thus create more endings as well. The game follows the implementation of the three rules of robotics by Isaac Asimov that ensure the obedience of androids and their inability to hurt their human owners. The game follows the story of three androids, two of whom are beginning to show signs of faultiness and who strive to cope with their artificial origin, their human needs, wishes and desires. Those androids that 'wake up' and evolve beyond their original settings by the CyberLife company are referred to as 'deviants'. At the same time, many perceive them not only as victims of malfunction or virus, but also as a real threat.

The term 'android' is defined by K. MacDorman and H. Ishiguro[4] as an autonomous machine which is not only humanoid but resembles a person to such an extent that, under certain circumstances, it can be regarded as a person and is metaphorically characterised by J. Robertson[5] as a 'passing' robot. The history of the android figure in fiction dates back to the early 16th century when this world related to alchemical practices and the creature of *homunculus was believed in* (a fully formed, miniature human body, according to some medical theories of the 16th and 17th centuries). At the same time, let us not forget the character of the 13th-century *Golem,* often referred to as an inspiration for the metaphor of an android as a slave and the associated psychological and philosophical implications and reflections.[6] MacDorman and Ishiguro argue that it is necessary to subconsciously react to the character of an android as a human, which at the same time provokes an additional dissonance between the knowledge of machine differentiation and visual

1   QUANTIC DREAM: *Beyond: Two Souls (PlayStation 3 version)*. [digital game]. Tokyo, San Mateo, CA : Sony Interactive Entertainment, 2013.
2   QUANTIC DREAM: *Heavy Rain (PlayStation 3 version)*. [digital game]. Tokyo, San Mateo, CA : Sony Interactive Entertainment, 2010.
3   QUANTIC DREAM: *Beyond: Two Souls (PlayStation 3 version)*. [digital game]. Tokyo, San Mateo, CA : Sony Interactive Entertainment, 2013.
4   MacDORMAN, K. F., ISHIGURO, H.: The Uncanny Advantage of using Androids in Cognitive and Social Science Research. In *Interaction Studies,* 2006, Vol. 7, No. 3, p. 332.
5   ROBERTSON, J.: Gendering Humanoid Robots: Robo-Sexism in Japan. In *Body & Society*, 2010, Vol. 16, No. 1, p. 18.
6   See also: SIMONS, G. L.: *Is Man a Robot?*. Hoboken, NJ : John Wiley and Sons, 1986.

similarity, leading to prejudice[7] and marginalization mechanisms. It is associated with the theories of post humanism and transhumanism. Transhumanism is a *"project of modifying the human species via any kind of emerging science, including genetic engineering, digital technology, and bioengineering"*[8] with a view to empower a human being, and to enable them to achieve his or her full intellectual, physical and emotional potential, cure them from diseases and prolong his or her life. This leads to the fact that, in terms of the next step in development, androids can be interpreted as 'post-human', as a new version of the human form. The characters of the game pursue very human goals and embody what are closer to humanistic values rather than post-human values. At the same time, a player is exposed to posing complex moral questions to each of the characters (sometimes almost simultaneously), which opens the conditions for creating postmodern (hyper)identity and the almost transhuman cyborgization of the player in the game interface.

The triple perspective allows one to experience the human vs. android conflict not only through an individual, personal drama but also through a wider political and social context. Therefore, it is evident that narration and heroes are not the main goal, and instead of examining the sociological and political consequences of slavery, racial prejudices, capitalist inequality and exploitation, the game focuses on the consequences of and responsibility for the choice. Androids should not change their perspective of identity, they are a 'new person, and are therefore a new subject of anthropocentric perspective. Deriving from Z. Bauman[9], who perceives *self* as a constant construing rather than as implying or pre-defining, one can see the formation of identity in terms of time formation and the ease with which the identity changes, adapts, and which is being experimented with as part of the lifestyle and the sign of it (?). S. Bukatman[10] mentions *terminal identity* based on postmodernist theories and transhumanism and which Jean Baudrillard[11] described as a *terminal of multiple networks* and in whose space experimenting with identities and decisions that lead to a more dystopic environment occurs. This is related to offering and willingness to re-live the game again in the 'evil' or 'devilish' version. At the same time, players prefer to play a heroic and 'positive' character; however, in case they proceed to play the game for the second time, they are more likely to choose the 'evil path'.[12] After the experience of the game, in choosing our own moral compass and preferences, it is easier to use the idea of power or behaviour which under other circumstances is considered unacceptable or generally categorized as bad. By provoking a player to make different decisions and try to act differently, the story (stories) will not be restricted to one right path, or one that can be considered as a truly imperatively good one.

The story embodies the serious issues of the 20th century, such as how a person is defined, how we can operate with identities or which decisions can be considered right. The game points to the strong position of man in the universe and suggests that a man can be overthrown by means of self-tormenting desire to cross the boundaries of human wisdom and body. This implies the foreseeable possibility of such a future and warns those players who choose dystopic solutions of such a potential future. The game offers
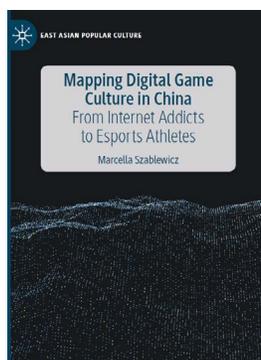
a distinction between androids and people through multiple dichotomies that form pairs; master – slave, perfection – imperfection, creator – created. Re-learning to be a human is an important process if human values are to be deconstructed through the boundaries between the dichotomies and through dehumanization as the embodiment of such deconstruction.

BIBLIOGRAPHY

BAUMAN, Z.: Culture and cosmopolis ... liquid-modern adventures of an idea. In GRINDSTAFF, L., LO, M-Ch., HALL, J. R. (eds.): *Handbook of Cultural Sociology*. London : Routledge, 2018, p. 657-665.
BUKATMAN S.: *Terminal Identity. The Virtual Subject in Postmodern Science Fiction.* Durham, London : Duke University Press, 1993.
GERGEN, K. J.: *The saturated self: Dilemmas of identity in contemporary life*. New York : Basic Books, 1991.
GIAKALARAS, M. M., TSONGIDS, Ch. P.: Avatars in Videogames. In SAMPANIKOU, E. D. (ed.): *Audiovisual Posthumanism*. Cambridge, MA : Cambridge Scholars Publishing, 2017, p. 284-290.
LANGE A.: "You're Just Gonna Be Nice": How Players Engage with Moral Choice Systems. In *Journal of Games Criticism*, 2014, Vol. 1, No. 1, p. 1-16. ISSN 2374-202X. [online]. [2020-03-15]. Available at: <http://gamescriticism.org/articles/lange-1-1>.
MacDORMAN, K. F., ISHIGURO, H.: The Uncanny Advantage of using Androids in Cognitive and Social Science Research. In *Interaction Studies,* 2006, Vol. 7, No. 3, p. 289-296. ISSN 1572-0373.
QUANTIC DREAM: *Beyond: Two Souls (PlayStation 3 version).* [digital game]. Tokyo, San Mateo, CA : Sony Interactive Entertainment, 2013.
QUANTIC DREAM: *Heavy Rain (PlayStation 3 version).* [digital game]. Tokyo, San Mateo, CA : Sony Interactive Entertainment, 2010.
ROBERTSON, J.: Gendering Humanoid Robots: Robo-Sexism in Japan. In *Body & Society*, 2010, Vol. 16, No. 1, p. 1-36. ISSN: 1357-034X.
SIMONS, G. L.: *Is Man a Robot?*. Hoboken, NJ : John Wiley and Sons, 1986.

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7   Remark by the author: See more for 'the uncanny valley' by Masahiro Mori.
8   GIAKALARAS, M. M., TSONGIDS, Ch. P.: Avatars in Videogames. In SAMPANIKOU, E. D. (ed.): *Audiovisual Posthumanism*. Cambridge, MA : Cambridge Scholars Publishing, 2017, p. 284.
9   BAUMAN, Z.: Culture and cosmopolis ... liquid-modern adventures of an idea. In GRINDSTAFF, L., LO, M-Ch., HALL, J. R. (eds.): Handbook of Cultural Sociology. London : Routledge, 2018, p. 658.
10 BUKATMAN S.: *Terminal Identity. The Virtual Subject in Postmodern Science Fiction.* Durham, London : Duke University Press, 1993, p. 2.
11 GERGEN, K. J.: *The saturated self: Dilemmas of identity in contemporary life*. New York : Basic Books, 1991, p. 157.
12 LANGE A.: "You're Just Gonna Be Nice": How Players Engage with Moral Choice Systems. In *Journal of Games Criticism*, 2014, Vol. 1, No. 1, p. 3. [online]. [2020-03-15]. Available at: <http://gamescriticism.org/articles/lange-1-1>.

MAPPING DIGITAL GAME CULTURE IN CHINA: FROM INTERNET ADDICTS TO ESPORTS ATHLETES

SZABLEWICZ, M.: *Mapping Digital Game Culture in China: From Internet Addicts to Esports Athletes*. New York : Palgrave Macmillan, 2020. 218 p. ISBN 978-3-030-36110-5.

Mária Koscelníková

When the term *video game* is uttered, many gamers imagine a huge culture, a multitude of genres, and millions of possible ways how to play and enjoy them. Especially in Europe, foreign and local video games are available, and we do not have to think either about the way we play them or how we choose them. When it comes to games, European gamers are not particularly prejudiced. Discussions about playing video games tend to stay on gaming fora, occasionally in newspaper or lifestyle magazines. In Europe, we do not distinguish between good and bad games based on the amount of money we must pay for them in terms of items, DLCs or other locked options and we simply play games regardless of their specifics. Marcella Szablewicz, however, wants to show us a different world. Regarding digital games and culture, China is nothing like you would expect. Full stadia of video game fans during eSports events or massive online viewership may create an illusion of a carefree Chinese gaming environment, but not many people know that the journey of many Chinese gamers and fans towards digital games is tough and bitter. Marcella Szablewicz's book presents the reader with the complexity of Chinese culture and society. The first chapter introduces the origins of her long-term complex research of Chinese culture and gaming habits. With regards to the historical and political situation in China, digital games play a key role in the lives of many Chinese. Through situational analysis, the following six chapters reveal the causes of the great popularity of digital games in China, the origins of Chinese devotion to them, as well as many social behaviours and cultural references.

The second chapter of the book informs the reader about the most important place for Chinese gamers – Internet cafés. Due to China's political ideology, as well as social conventions, many Chinese gamers have found refuge under the rooves of Internet cafés, where they could escape the high expectations that Chinese society places on an individual. The popularity of the Internet has attracted many Chinese, but it has also drawn a substantial amount of negative public opinion that has led to restrictions. That, however, did not make Chinese gamers stop visiting Internet cafés and they have always remained an important part of their lives. The popularity and availability of the Internet also caused the rise of Internet addicts. Chinese public opinion on Internet addiction was negatively influenced by the popular Internet cafés. Panic in the media gained the attention of Chinese officials as well as medical professionals and Internet addiction became a problem. The third chapter of Marcella Szablewicz's book depicts the concept of the Internet as a kind of spiritual opium and the consequences of its use that resounded with the Chinese public. Historical and practical data perfectly illustrate the changes China has undergone and its public mood. We can see how the widespread popularity of the Internet, a welcome technological advance, negatively impacted Chinese Internet cafés, contributed to the creation of a new clinical disorder, and led to digital game restrictions and licensing of the available foreign games.

As previously mentioned, for a European reader and gamer, China is a completely foreign environment. High expectations laid on Chinese society have easily persuaded Chinese gamers what to do in their leisure time. Digital games as a problem-free and skill-building environment absorbed many hours which Chinese gamers have spent gladly. Chinese culture is extraordinarily complex and sometimes weird, as proved by Marcella Szablewicz's fourth chapter where she presents two different ways of thinking about video games in China: *danji* and *wangluo*. Along with the patriotic spirit embedded in Chinese history, these two concepts completely change the Chinese gaming environment. The chapter discusses patriotic leisure, pro gaming and shaping digital gaming culture in China. The next chapter discusses the issue of the previously mentioned *wangluo* games and stories of the people who play them in more detail. The concept of sideways mobility is introduced, as well as a more specific understanding of digital games as a means of productivity boost and escape. Combined with the cultural differences of *wangluo* gamers, we learn about the necessity of digital worlds and their importance for Chinese gamers. In the era of wireless smartphones, many Chinese gamers use immobile mobility and they stay connected with digital games even more.

The strict Chinese environment, high social and patriotic expectations placed on an individual, and economic differences have created many social gaps that Chinese gamers moderate or ventilate through culture and humour. The sixth chapter of the book discusses cultural elements like memes, slang, and affective intensities that Chinese gamers are familiar with. These important cultural elements help them soften the tough conditions they live in, and we learn about their impressive abilities of joke deciphering, the unique concept of losers and gay friends or emotions that attract them to the spiritual homeland digital games represent. Chinese digital game culture stuns the reader and offers many untouched concepts. The last chapter of the book concludes with the challenges and changes China experienced upon the emergence of the Internet and digital games. Chinese digital game culture must face public opinion, and the tough, adamant, historical and political background that still shapes the Chinese today. The book is a great contribution to the ever-expanding series of books on video games in general, and it is an important book for every researcher, since it helps broaden their horizons. After reading this book, you will see China differently.

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Collateral Growth: Digital-gaming Sector During the COVID-19 Outbreak

Michal Kabát, Nikola Kaňuková, Alexandra Kukumbergová

It is no secret that the professional part of the sport industry is mostly funded by the amount of sponsor's visibility to fans and means of getting their attention. Championships, leagues, challenges, shows and even bathroom selfies of athletes help to sell advertisement opportunities for brand managers to receive more views. Brand logos placed on players' jerseys and all around stadiums represent that well, but real economic value is mostly based on revenues from broadcasters selling their advertising space and buying licences that provide popular content. For example, the Olympic Games were able to generate almost 3 bil. USD in 2016 solely from broadcasting rights, since they are universally popular in many countries – hence the high demand for screening the events. The specific popularity of any sport depends on many factors and, because it is quite expensive to take part in some sports at a competitive level. Having a representation able to compete and to win (occasionally) is the main key for sponsors to 'enter the game'.

Playing digital games at a competitive level also requires some investment, but the bar is much lower and while this does not guarantee a sustainable career opportunity for many people, it definitely can streamline the process of picking and developing talents on a global scale. Professional and semi-professional competitive gaming or so called eSport is on the verge for quite some time, but only now do we see bigger stakeholders outside the gaming industry stepping in and investing in both teams and competition development.

The fact is, that even before the COVID-19 outbreak, advanced technologies made some changes in the ways that sports are watched and perceived. For example, drop in the revenues due to shorter attention spans – people tend to spend less time watching and it seems they prefer edited versions or just highlights, there are new viewing habits, such as reaching out in markets in previously unpopular countries, etc. That existed even BC, so during quarantine and lockdowns, sports have an even harder time to stay in people's focus. One of the ways to do it is through eSports:

- NASCAR used eSports as a way of preserving cancelled races in new format - even featuring pro drivers in the so called *eNASCAR series*;[1]
- Similarly, *Formula 1* turned to virtual races to substitute for races that have been cancelled or postponed;
- *FIFA* is an obvious answer to ditching real football pitches and moving players to virtual stadiums and is even helping in terms of funding the football community affected by the pandemic;[2]

- local experiments, for example, the Czech national downhill skiing championship took place via the mobile game *Ski Legends*, the ČAAF (Czech Association of American Football) is putting its players into Madden NFL 20 with a project *Paddock eliga*.

On the local Slovak scene, we can see that some partners of events are very keen on keeping some of the events going (in some form):
- in April, the local online tournament Y-Games @home happened, sponsored by VUB Bank and Orange and even officially supported by Branislav Gröhling, Slovak Minister of Education. Voluntary contributions that were collected were sent to local charity projects for fighting COVID-19;
- The Fortuna league came up with new form of tournament – *e-Fortuna Liga Challenge*, where they have their teams represented by one football player and have them compete via PlayStation;
- The Slovak ice hockey championship was cancelled, but the game was kept on screen by one of its partners, Borovička Borec in the form of popular celebrities (television hosts, musicians, youtubers and actual sportsmen) playing hockey online.

Apart from just eSports, even if we still cannot be certain that gaming is recession-proof, during these times it seems to be doing fine:
- Steam has been thriving as well; new record numbers of people playing were achieved during lockdown, Twitch has reported massive increases in user streaming hours;[3]
- Other companies are trying to accommodate as well – Google's cloud gaming service Stadia has been free since April the 9th (even if only for one third of the available games);
- New pro-gaming statements have been made, such as Play Apart Together, a global game industry initiative;
- Gaming as an effective way to achieve social distancing and stopping the spread is even supported by the WHO (who added 'gaming disorder' to its list of addictive behaviours);[4]
- Even online casinos and poker are thriving and with lack of sporting events to bet on, people are even betting on the weather and some states are legalizing betting on competitive gaming.

Generally, the world of gaming has been thriving, at least in terms of business (Chart 1). It has however also been affected in negative ways. Regarding gaming events, COVID-19 has divided these into two categories. For some of them, organisers tried to adapt events to given circumstances, e.g., the ceremony of the *British Academy Games Awards* was streamed online for the time in history, the eSport tournament *Intel Extreme Masters Katowice* took place, but without an audience on-site, etc. Some decided cancellation was the best choice like *DiGRA 2020*. Some of the largest events had to be cancelled or postponed due to the virus – for example, *Activision-Blizzard's Overwatch League*, *TwitchCon*, *Minecraft Festival* and many other gatherings and tournaments.[5] Some other negative side effects are also occurring: psychologists are warning us that self-quarantine may bring risks to some vulnerable groups and people with addictions.

1   FINGAS, J.: *NASCAR is replacing canceled races with esports featuring pro drivers.* Released on 22nd March 2020. [online]. [2020-20-05]. Available at: <https://www.engadget.com/2020-03-19-nascar-esports-racing-series-fox.html>.
2   *FIFA starts immediate financial support to member associations in response to COVID-19 impact.* Released on 24th April 2020. [online]. [2020-12-05]. Available at: <https://www.fifa.com/who-we-are/news/fifa-starts-immediate-financial-support-to-member-associations-in-response-to-co>.

3   KOZELKO, D.: *COVID-19: how is esports coping compared to traditional sports?.* Released on 8th April 2020. [online]. [2020-12-05]. Available at: <https://www.lawinsport.com/topics/item/covid-19-how-is-esports-coping-compared-to-traditional-sports#_ftn5>.
4   CANALES, K.: *The WHO is recommending video games as an effective way to stop the spread of COVID-19, one year after adding 'gaming disorder' to its list of addictive behaviors.* Released on 2nd April 2020. [online]. [2020-15-05]. Available at: <https://www.businessinsider.com/who-video-games-coronavirus-pandemic-mental-health-disorder-2020-4>.
5   THALER, M.: *2020 Cancelled Gaming Events, Conference, and Tournaments.* Released on 23th March 2020. [online]. [2020-15-05]. Available at: <https://steelseries.com/blog/2020-cancelled-gaming-events-201>.
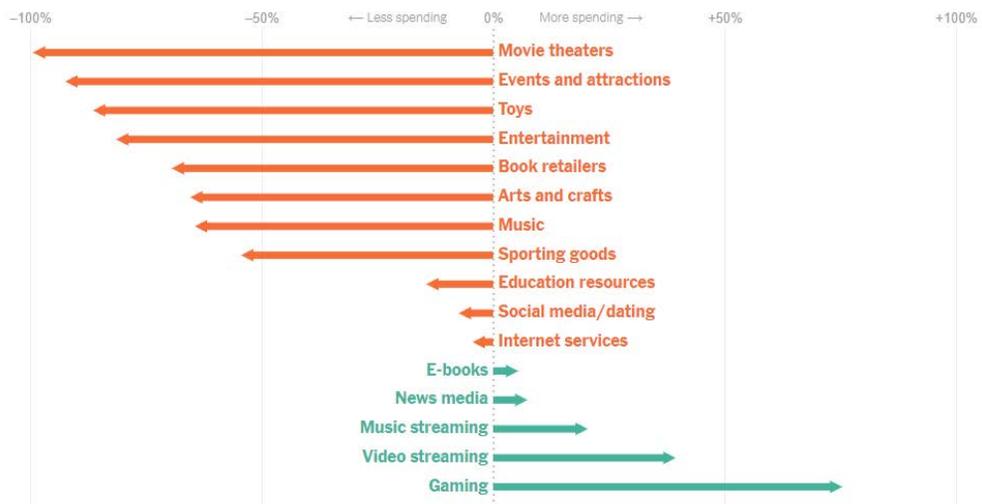
Chart 1: Changes in spending from 2019 to April 2020

Source: LEATHERBY, L., GELLES, D.: *How the Virus Transformed the Way Americans Spend Their Money.* Released on 11th April 2020. [online]. [2020-15-05]. Available at: <https://www.nytimes.com/interactive/2020/04/11/business/economy/coronavirus-us-economy-spending.html>.

BIBLIOGRAPHY

CANALES, K.: *The WHO is recommending video games as an effective way to stop the spread of COVID-19, one year after adding 'gaming disorder' to its list of addictive behaviors.* Released on 2nd April 2020. [online]. [2020-15-05]. Available at: <https://www.businessinsider.com/who-video-games-coronavirus-pandemic-mental-health-disorder-2020-4>.

FIFA starts immediate financial support to member associations in response to COVID-19 impact. Released on 24th April 2020. [online]. [2020-12-05]. Available at: <https://www.fifa.com/who-we-are/news/fifa-starts-immediate-financial-support-to-member-associations-in-response-to-co>.

FINGAS, J.: *NASCAR is replacing canceled races with esports featuring pro drivers.* Released on 22nd March 2020. [online]. [2020-20-05]. Available at: <https://www.engadget.com/2020-03-19-nascar-esports-racing-series-fox.html>.

KOZELKO, D.: *COVID-19: how is esports coping compared to traditional sports?.* Released on 8th April 2020. [online]. [2020-12-05]. Available at: <https://www.lawinsport.com/topics/item/covid-19-how-is-esports-coping-compared-to-traditional-sports#_ftn5>.

LEATHERBY, L., GELLES, D.: *How the Virus Transformed the Way Americans Spend Their Money.* Released on 11th April 2020. [online]. [2020-15-05]. Available at: <https://www.nytimes.com/interactive/2020/04/11/business/economy/coronavirus-us-economy-spending.html>.

THALER, M.: *2020 Cancelled Gaming Events, Conference, and Tournaments.* Released on 23th March 2020. [online]. [2020-15-05]. Available at: <https://steelseries.com/blog/2020-cancelled-gaming-events-201>.

Games and Toys

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Juraj Malíček is an associate professor at the Institute of Literary and Artistic Communication, Faculty of Arts, Constantine the Philosopher University in Nitra, where he focuses on the theory of popular culture with an emphasis on its broader philosophical and aesthetic contexts, particularly in the interpretive tradition of pragmatism and neo-pragmatism, which are his starting point also within the history of cinematography and interpretation of film work. He teaches these disciplines in the approbation subjects of aesthetics and aesthetic education. Occasionally, he publishes in journals, books, and online. He likes shopping in stationery stores, collecting action figures, and prefers a shotgun in digital games. In the animated movie, Ralph Breaks the Internet, he dubbed the character of a geek (who asked Groot what kind of tree he is) for the Slovak language version.

A gorilla is hurling barrels after a plumber.

Almost forty years later, I am jumping around the living room, sweating, gasping, doing squats with a hoop in my hands, and thinking if it might be a better idea to exercise normally. For the sake of my health, not that I would want to out of choice, I have to because many years spent sitting and playing digital games left me in bad shape.

But no, digital games are not to blame, I have been desperately uninterested in physical movement ever since childhood, and it's not getting any better. Nevertheless, I spend at least twenty minutes every night, jumping around in front of the TV, really regularly exercising for the first time in my life, and even really enjoying it. Actually, this is the second time. Something like this happened to me once before. I loved ski jumping, just virtual, of course, and if the Wii pad was still working, I would carry on jumping even today. Actually, it was not possible to really jump, just to jiggle about; your feet had to stay in one place. That was not always possible, so therefore the equipment pretty quickly got broken.

Such nonsense by the way. A controller you stand on.

Today, instead of that, I'm squeezing a plastic hoop in Ring Fit Adventure, with the second Joy-Con attached to my right thigh, and fascinatingly thinking about how someone could invent this. Not too deeply, I'm too tired from exercise, but can manage just enough to realize the huge variety with which a relatively modest reservoir of movements can be used in a game mechanism and not look stereotypical. There probably exists some special term for it that I should know, if I still felt the need to theorize about digital games, but since I don't feel that need anymore, I don't care, and I'm just enjoying the game itself.

The goal is to defeat an extremely muscular demon, a black mountain of anabolic steroids. The game itself is actually a very straightforward linear adventure, and nobody would even care two hoots about it, if it was not a game designed for recreational sporting activity.

I don't like to think of Switch as an investment, it's just a very sophisticated toy, without which we could cope perfectly well, so why pretend it's something else. Although, I still can't shake the feeling that it was really well-spent money.

I really exercise regularly, and it's nothing more than physical suffering, but that's okay, that's how it should be with exercising. It's good when it hurts. At the same time, however, I realize that it is actually counterproductive because digital games have also become so popular because they have been acting substitutively. Within a fictitious world, they allowed us to do something that we were not able to do in reality. Until I started driving, I liked car simulators. Even today, I still like to play them, but it's better in reality. I have never skated, I couldn't do it, but I was glad I could at least try it in a digital game.

Today, when I play and don't exercise, I am usually fishing, which I could also do in the real world, but in a digital game, it's more comfortable. And so I come to Labo, which is actually even more useless at the core. The autonomous digital-gaming world is no longer enough, we are returning to reality, at least partially, and the means to do that are by using new equipment, which we make out of pre-printed cardboard. And it's fun again. Virtual playing is connected with playing in a physical reality that is actually (and at least partially) a denial of the fundamental meaning of digital gaming. We do something imaginary because it isn't possible in reality, we can't do it, or it's too complicated. Labo offers an acceptable compromise. We play with physical objects and, at the same time, we play in virtuality, and since it's actually double play, it's twice the fun as well.

After all, Nintendo was founded as a toy company a long time ago, and it has remained so until today. Toys disguised as technical devices, but toys nevertheless. And while dust is slowly covering the VR kits of both PlayStation and Xbox, companies who are refusing to admit to themselves, perhaps due to obstinacy, that virtual reality is a dead-end. Nintendo bet on folding cardboard and once again stole a march on everyone. Like there really is no more creative activity than inventing toys.

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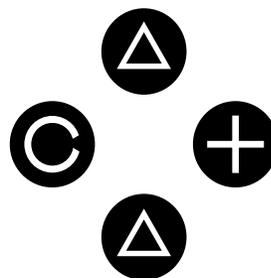
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