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Viktor OGNEVIUK,
Mariia MALETSKA,
Nataliia VINNIKOVA,
Vitaliy ZAVADSKYI

VIDEOGAME AS MEANS OF COMMUNICATION AND EDUCATION: PHILOSOPHICAL ANALYSIS

Abstract

The study is devoted to the philosophical consideration of specific features of communication and education through the use of video games. *The purpose of the research* was to consider the specific features of communication in the process of interaction within video games, to reveal their educational potential and the difference in their use for educational purposes. The analysis of videogame definitions has allowed focusing on their specific features, namely: interactive, rule-based nature and the need of the specific hardware. As a result, the possible types of dialogue within video games have been considered and, on their basis, the main types of interaction have been formulated for analyzing their use in education: interaction with no active player, player-videogame interaction in case of one-player videogames, player-videogame-player interaction and player-community-videogame interaction. *In conclusion*, the similarity of videogame playing and the learning process has been delineated in relation to the analyzed types of interaction. The authors state the further need for a comprehensive study of the specific features of each of described types due to the significant differences in the dialogue and educational potential of videogames belonging to them.

Keywords: videogame philosophy, philosophy of education, educology, game studies, interactivity, gamification, game-based learning, learning through videogames, dialogue.

Introduction

In human society and culture, games and non-game activities were long separated from each other. However, in the 20th and, especially, in the 21st century, the so-called “ludification of culture” (Raessens, 2014) has taken place. The play has entered the non-play spheres of life, which were earlier considered as “serious”, i.e. which could not be combined with playful activities. Even such phenomena as work and play, which had long existed as polar concepts, began to interact in such a way that now we observe the interference of work and play or work/play interplay (Dippel & Fizek, 2017).

Ludification of culture in contemporary society is directly connected with the spread of video games and their implementation in different areas. Being a relatively new phenomenon, videogames, their use and their impact on human existence require proper study in all their manifestations. Despite the presence of more technical researches (e.g. Crawford, 1984; Salen & Zimmerman, 2003; Fabricatore, 2007; Schell, 2014) and works devoted to philosophical reflections on videogames (Juul, 2005), videogame culture (Shaw, 2010; Muriel & Crawford, 2018) and even video-ludification (Bruns, 2020), there are still many unexplored issues in the area of videogame philosophy.

One of such issues is the specifics of communication conducted in the process of interaction with video games. The complex study of the difference between the dialogue with the use of videogames and other media is especially relevant in view of COVID-19 pandemics, during which videogames have become not only the way of spending free time but also a means of everyday communication and interaction between people, which even lead to new acquaintances and subsequent real-life contacts (Barr & Copeland-Stewart, 2021; Zhu, 2021). Videogames have also been actively used to improve the educational process and enhance the online-learning (Favis, 2020; Khan, 2020). Thus, *the purpose of our research* is to consider the specific features of communication in the process of interaction within video games, to reveal their educational potential and the difference of their use for educational purposes. Despite such wide use and scientific interest, the specific features of the dialogue through video games have not been described properly. And namely, these features may be decisive in giving preference to the use of videogames in education, the process based on the dialogue between teacher, students and literary sources. The impact of videogames on communication and, therefore, education is usually given generally, without paying attention to different videogame types and genres, or, on the contrary, studies devoted to edutainment (Corona, Cozzarelli, Palumbo, & Sibilio, 2013), gamification in education, edutainment and game-based learning (Schmidt, Emmerich, & Schmidt, 2015; Pesare, Roselli, Corriero, & Rossano, 2016; Rabah, Cassidy, Beauchemin, 2018) can consider only a narrow range of genres, which leads to gaps in understanding specifics of peculiarities of the impact of videogames on education. To avoid this and reveal the specific features correctly, consequently, to achieve the stated purpose, we have distinguished the main issues important for considering and formulated *the following hypothesis*:

- The dialogue of subjects (players) within the

videogame, their interpretation of the game and further usefulness of videogames for educational purposes differ in accordance with the level of available interactivity;

- The difference in communication and interpretation may depend not only on the number of players but also on a videogame genre, which determines gameplay mechanics;
- Some videogame genres are similar to the educational process in their nature; therefore, they are more useful for educational purposes.

Methodology

Although our study has an interdisciplinary nature and spheres of IT technologies and digitalization intersect with philosophy and educology, it is based on philosophical methodology, which is of great importance for a proper philosophical consideration of videogames and their impact on communication and education. Analysis, synthesis and further systematization, therefore, have been used to study the videogame definitions and distinguish the defining features of the videogame as a new phenomenon of contemporary society. This allowed us to separate video games from games and to focus directly on their specificity. To show the impact of video games on contemporary communication and changes in it within the videogame world, the hermeneutic methodology has been applied. The communicative approach made it possible to describe a videogame as a dialogue, therefore, to deeper analyze the educational potential of videogames as means of possible dialogue between teacher and students, students and learning sources etc.

To study videogames and the specificity of their use, both analyses of existing research and practical involvement in videogame playing have been used. This gave us the opportunity to apply a case study to the issue considered. Video games representing different genres and game mechanics have been studied as particular cases of communication and interaction, and their pos-

sible usefulness for educational purposes has been considered on examples of particular game mechanics.

Presentation of Basic Material

Being analyzed as (at least, partially) games, videogames are usually described with the help of defining features that J. Huizinga (1949) proposed in his study, namely: the fact of freedom of play; stepping out of “real” into specific temporal and spatial dimensions; limitedness and secludedness. The following characteristics are also mentioned to complement J. Huizinga’s concept that has become fundamental for philosophical reflection on videogames: the importance of rules which define the game process, determine the goal and legal methods of its achievement (Abt, 1970; Caillois, 2001); some researchers also add obstacles (Mitchell, 2020) or conflict (Avedon & Sutton-Smith, 1971) as the centre of the game process and, therefore, the defining features.

Since the beginning of the so-called “game studies” (Nieborg & Hermes, 2008; Wolf & Peron, 2014; Horban, Martych, & Maletska, 2019), the interdisciplinary space of (video)game research, several definitions of videogames have been formed. However, none of them has become generally accepted due to the fact that the existing definitions do not cover the whole videogame phenomenon in its diversity. The defining process would be out of the purpose of our study. Therefore, we do not give our own definition of the videogame; however, describing the main defining features is necessary to substantiate the difference between the impact of videogames on communication and education. Thus, in our study, the features distinguished in the process of defining videogames by game researchers (Frasca, 1999; Konzack, 2002; Salen & Zimmerman, 2003; Tavinor, 2009; Sicart, 2009; Newman, 2012; Bergonse, 2017) have been analyzed in order to reveal the most common, which are:

- Rule-based system, which is fundamental for

game mechanics and gameplay;

- Interaction with player(s);
- The need to use specific hardware/software for playing;
- Fictional world/context.

Despite the fact that many games also need special equipment (e.g. chess board and pieces), videogames cannot be played at all without the use of specific hardware (PC, game console, mobile phone). The equipment for games can often be hand-made, and it is too difficult in the case of video games. The difference between videogames and games lies not only in the existence of the need for hardware/software for playing, but even the nature of rules also differs due to the fact that in videogames, rules are not negotiable to the same degree as rules in classic, or analogue games (Mosberg Iversen, 2009, p. 32). This is proved by the analysis of rules in different games, beginning with simple make-believe play. In his research, C. Goetz (2018) illustrates four cases of work of rules to structure the play, and not all of them can be used for videogames. The first case (playing without the structural and material support) is possible only for make-believe play, which needs the use of internalized images of the object. The same thing can be stated about the situation when a player’s imagination and actions go beyond the rules to create a new game space. In a video game, all actions beyond game narrative are still a part of the videogame space. However, it does not make videogame-specific cases of “games”. Rules of game can be broken by players or arbiters. Rules of video games cannot be broken without breaking the whole game world. This changes even the so-called “magic circle” used to describe the limitedness of play (Liebe, 2008; Juul, 2008; Consalvo, 2009).

The difference also lies in the interaction between player and game/player and videogame. In the case of games, they are played, and there are not many cases when a game lasts without a player’s support. Interactive novels can also hardly be considered a kind of an analogue game be-

cause the main idea of playing is lost here; however, they are video games. There are also not many games with more than one thousand simultaneous players, and in the case of video games, such a possibility is widely proposed. Therefore, we can state that video games and games have similar features, which are rules, the possibility of interaction and fictional context, but they are not identical. More videogames can be described as rule-based interactive systems, and it is proved by the existence of videogames that are not games in the broadest sense.

It is important to analyze the specific features of communication to consider the usefulness of video games for educational purposes. Communication and dialogue are the most important parts of education. They give the opportunity to reveal and know the “other” (Aleksandrova, Khrypko, & Iatsenko, 2020). Both pedagogical dialogue and dialogical pedagogy can be seen as necessary parts of the learning process (Elliott, 2017), and today, the second one is widely applied due to the necessity of increasing the level of students’ interaction in the classroom and, especially, in conditions of online learning and technical improvement of education (Ognevyuk, 2018) which turns the dialogue between students and teacher from mostly “live” to “frozen” and “turn-based”, that is more inherent in communication in social networks and on web sites.

According to M. M. Bakhtin (1981), a dialogue is the concept of complex relationships between subjects where they give and generate meanings to each other. These relationships are in a constant state of evolution, and it is constant conservation that can only grow in complexity – the longer it lasts, the more subjects of it are considered. Thus, there is a constant dialogue between all parts of the world. All texts, works and media are in a dialogue with each other to a greater or lesser degree.

The communicative theory is usually applied to in-game narratives and players’ dialogue. However, even interaction between game rules and hardware which proceed these rules can be

perceived as a kind of dialogue. As E. Barbosa Lima (2016) states, “Gameplaying, therefore, is only possible in the dialogue between both play and rules. In other words, gameplaying is the dialogue between these two forces. Without rules, the play does not proceed. It exists but cannot be acted on as it has no basis to act upon; play without rules is simply idealized action, free of constraints and/or labels; without play, rules are superfluous as they only exist to make playing possible” (p. 43). In the case of analogue games, this dialogue can also be observed. It occurs in the process of interaction between rules that determine the game process and the environment in which the game is played. However, in analogue games, this dialogue is almost impossible without the participation of players. In videogames, the role of the player consists in starting the videogame, and then the dialogue between rules and hardware begins, and it is usually hidden from players if there are no errors in the process of playing. On the other hand, videogame rules cannot be changed or omitted in the process of playing a videogame without specific actions (e.g. rewriting these rules on the level of a videogame code or creating modifications that transform the way that rules work). So, *the dialogue between rules and the hardware* is the main type of dialogue that is always present in video games. This dialogue is fundamental for the establishment of other levels of communication in the videogame space.

Another type of dialogue possible in video games is *the dialogue between a player and a videogame*. This dialogue can be compared with the dialogue between reader and narrative if we talk about the narrative present in video games. However, the greatest difference lies in the possibility of interaction with the videogame, the change in ways of perception of information given through the videogame and the possibility of the existence of various speeds of interaction, which leads to the presence of both “live” and “frozen” communication and their different mixes within gameplay. Considering such video-

games as “Sid Meier’s Civilization” series, we can see that player communicates with the game both actively, while reading in-game information and deciding on units’ actions, and passively, due to the fact that videogame is turn-based and the live communication occurs only inside of one turn. The videogame can also be switched off and resumed several days later, which also transforms active communication into passive. Some videogames do not give the player the opportunity to “stop the time” and postpone the decision-making. A striking example of it is “Longing”, the videogame that continues even when a player is outside the game world, and the game is switched off. This example demonstrates that video games can continue the dialogue between rules and hardware even without the dialogue with the player. Therefore, the player has to participate in active dialogue with a game with no possibility to “freeze” it if he does not want to lose in-game events and influence on the videogame world.

Playing in multiplayer mode complicates the communication in video games and forms the next level of communication: *player-player communication*, performed through the in-game means and mechanics. This communication can also be active (e.g. in-game chats, gestures of characters) and passive (e.g. through in-game e-mail, message boards etc.).

We can also consider in-game dialogue in terms of communication between *a player and videogame characters*. In videogames, an individual’s subjectivity is constituted through both relationships with other players and such concepts of virtual worlds as player’s avatars (Peach, 2003). Narratives in videogames are often revealed through the avatar (Suduiko, 2018), which is identified with the player and, therefore, creates the emotional connection with the player, the feeling of immersion into the game world. So, the player can communicate with other players, with so-called NPCs (Nonplayer characters) (Cade & Gates, 2017) and even with his own avatar. The dialogue with NPCs and avatars can

be part of the narrative or game mechanics or can exist only as a decorative part of the videogame world. The dialogue and the further interpretation of the videogames changes depending on the complexity of the possible player’s actions directed at his own avatar, NPCs and other players.

The fifth type of dialogue is the dialogue between *a player and a game designer*. In the case of other media, e.g. films and books, the dialogue between the author and the reader are spread over time, and the reader cannot influence the works that have already been written. New types of media create so-called “participatory culture” (Delwiche & Henderson, 2012), in which the reader becomes the co-creator of the culture products, and videogames are a striking example of it, especially when we talk about indie games (Best, 2011), which are developed by small studios or even by one person. Large studios also maintain contact with players. Therefore, video games appear as a dialogue both in case of conveying senses and further videogame development and changes.

The perception of the dialogue in video games also depends on the correlation between narrative and ludic parts of the videogame. Therefore, this dialogue may vary in different genres. Thus, in videogames, all three types of communication distinguished by M. Buber (1965) can be observed: genuine dialogue, technical dialogue and monologue. In the case of both player-game and player-player dialogue, videogames can combine genuine dialogue, which lies in gameplay interaction inside the game world, technical dialogue, which is especially relevant in the case of player-player in-game interaction and even monologue, which engages the player in the interpretation of some parts of videogames (e.g. notes and information about the game world, which is not used in the process of playing). The “I-It” and “I-Thou” models of the dialogue distinguished by M. Buber (1970) can also be applied to the analysis of video games.

Therefore, we can state that in video games,

several levels of communication and types of dialogues are combined. Such complexity makes the interpretation of videogames different from the interpretation of texts and media, which, in turn, changes their impact on the player and, therefore, the usability of videogames in education. To analyze this difference in interpretation, we have considered videogames from the point of view of hermeneutics.

Generally, videogame hermeneutics is based on H.-G. Gadamer's ideas. Being the first ludologist and considering the interpretation of games, H.-G. Gadamer (2004) was interested more in games themselves than in the player and his views, stating that: "The players are not the subjects of play; instead play merely reaches presentation through the players ... The real subject of the game (this is shown in precisely those experiences in which there is only a single player) is not the player but instead the game itself" (p. 106). This statement describes games as subjects of interpretation that are at least partially independent from players (Saadanbekova, 2021, p. 86). Here, the similarity with the communicative approach to understanding video games can be seen: even games can unfold on the level of internal interaction and interpretation. However, in the case of video games, this becomes even more important for further studying because, in video games, rules are interpreted by hardware in the previously described dialogue between them.

From this dialogue, the first specific case of videogame hermeneutics arose – the so-called procedural hermeneutics. It is based on the procedural rhetoric (Bogost, 2008), which describes videogames as procedural systems ("procedurality" is derived from the function of the processor, which creates meaning through the interaction with the rules and interpretation of algorithms). Procedural hermeneutics has formed four main statements according to which videogames are interpreted: interpreting values in connection with context; the validity of interpretation is conditioned by compatibility with the ability of a player to interpret the videogame; understanding

of videogames requires an understanding of the software logic; videogames are understood twice – through the so-called "narrative spiral" and "hermeneutic spiral", therefore, the classic "magic circle" is criticized (Salin, 2018). The last statement is of particular importance both for understanding the dialogue that arises in the process of playing a videogame and for its use as a means of education. Due to their procedural nature and the possibility to combine the narrative with the ludic part, game mechanics etc., videogames are perceived by a player at least twice – as a story told and as an interaction based on this story. In the case of education, it means that videogames strengthen the perception of the given information because it is understood not only as a text, a narrative; firstly, a player interprets information in the form of a story, history of character or videogame world etc., and, secondly, in general interpretation of the videogame as a complex of activities, rules and game mechanics.

However, this is not the only way to consider videogames from the point of view of hermeneutics. The second specific case of videogame hermeneutics is the so-called real-time hermeneutics (Aarseth, 2003). While procedural hermeneutics is focused on the procedural nature of videogames, real-time hermeneutics considers the interaction between player and videogame as the central for sense-making and understanding. This approach is not a temporal approach due to the existence of different speeds and interpretations of the "real time" in videogames: "There are different speeds of interactive, which may still be seen as happening in real-time – just not very quickly" (Arjoranta, 2011, p. 7). In videogames, different concepts of time usually represent not the time itself but the quantitative criteria of interactivity, experience or perceived information. There are video games in which in-game time can be stopped or skipped and games where the time cannot be stopped or is synchronized with real-life time. In all these cases, the interaction and interpretation change, making the player-videogame dialogue different. It should also be mentioned that one

videogame can combine several options of interaction speed; for example, in “Heroes of Might and Magic V”, players act simultaneously during one turn; however, after the intersection of the interests of two or more players, the options of simultaneous interaction within one turn disappears.

Both these approaches are based on the main difference between videogames and other media – they underline interaction and its features in the case of videogames as specific software. Videogame hermeneutic approaches consider players in their interaction, which is important for their following analysis as an educational tool. In education, we have communication and interaction between the teacher and students and, in the case of video games, this model can be broadened and transformed into both communication as a dialogue of a video game and a player aimed at learning through a dialogue between a teacher and students within a videogame. Thus, the combination of the given approaches makes it possible to comprehensively analyze videogames as software which, in the process of procedural dialogue between game rules and hardware, creates the space for real-time interpretation of the videogame, its rules and mechanics by the player.

To achieve the stated purpose and answer the question of the difference in the dialogue of subjects (players) within the videogame, their interpretation of the game and further usefulness of videogames for educational purposes, we have distinguished four main types of player-videogame (-player) interaction: interaction with no active player; player-videogame interaction; player-videogame-player(s) interaction; player-videogame-community interaction. In these types, the change in interpretation and subjects’ impact on the communication within videogames can be traced along with the change of the subject’s place and role in the process of playing.

The first type of interaction, therefore, is *interaction with no active player*. Games of this type turn players into observers, and the only

player’s role here is to start the game after that video game lasts without the player’s interference and direct participation. In such video games, we can talk about inaction (Latypova & Lenkevich, 2020) rather than about activity and interaction. The central case of this type is the genre of so-called Zero-Player Games (ZPGs), which, in turn, can be divided into four categories: setup-only games, games played by AIs, solved games and hypothetical games (Björk & Juul, 2012). The classic example of setup-only ZPG is “Progress Quest”, the videogame developed by Eric Fredricksen as a parody of the RPG genre. In this videogame, the player has only a few options on starting the new game, and after that, the game runs without any possibility of the player’s influence. The further development of ZPGs leads to adding several options of interaction (the example of this is “Godville”, where the player has particular commands to interact with the game world, the random result of these commands and the possibility to turn off the option of interaction and play in “classic ZPG”). Another category related to the minimization of player’s interaction is the category of so-called “idle” games. Idle or incremental games reduce gameplay to a single repetitive action or even make it automatic, which also makes player’s interaction optional (Deterding, 2016).

This type of interaction makes the rules-hardware dialogue the most important part of such video games. For a player, the work of ZPGs looks like a monologue, and, in particular cases, it can be transformed into a very limited dialogue. Thus, in this type of interaction, we can talk about the interpreter rather than about the player because the component of interaction is minimized here. However, even these videogames are different from other media, which is proved by the procedural nature and the fact that these games are not always repeatable; their random parts make each time of playing unique. These features can be useful in education, although researchers do not consider video games with no active player as possible means of teach-

ing. Despite the low level of interactivity, such videogames still can transmit values and reflect important information; their possible usefulness also lies in the fact that they can serve as a model of processes to illustrate the information given by a teacher. Thus, we can state that even videogames with a low level of interaction that are perceived as a monologue rather than dialogue have educational potential.

The second type of interaction is *player-videogame interaction in the case of one-player videogames*. This interaction can be generally described as a dialogue between a player and videogame content. In different videogame genres, from action games and puzzles to shooters and platformers (Lee, Karlova, Clarke, Thornton, & Perti, 2014), the level of interactivity can vary. For example, already mentioned visual novels and interactive movies, which both are videogame genres, give the player a short number of possible actions in the process of interaction with the game world. They are focused on the videogame narrative. In the case of interactive movies, such as “Life is Strange” series, the player has few options of dialogue with NPCs; the chosen options can change the narrative; however, these changes are previously directed, and the interactivity here lies only in the exploration of the game world and decision-making based on the limited number of options given. On the other hand, highly-interactive genres as platformers, shooters etc. can exist without narrative at all, and interaction here is central for the player. The videogames with this type of interaction can be focused on narrative part, ludic part or combine them in order to have a greater impact on the player, but, in all such videogames, the player interprets the videogame content and mechanics in connection with his actions.

Videogames with this type of interaction are usually considered tools for game-based learning. These video games are useful to motivate students. However, they can also act as models of different processes and a means of transmitting information and checking knowledge. Play-

er-game interaction in one-player videogames makes it possible to build a videogame aimed at checking players’ skills, so tests and practical works can be designed in such a form.

The third type is player-player interaction which is implemented through the game, in other words, *player-videogame-player interaction*. Here, two subtypes can be distinguished: player-player interaction, which is optional; player-player interaction, which is necessary to start the game. In the first case, we can mention many videogames that provide the opportunity to play with other players, for example, “Minecraft”, “Grand Theft Auto” series, “Dark Souls”, “Dying Light”. Videogames with multiplayer mode can belong to different genres and be played on different platforms (PC, console, mobile phones and even cross-platform multiplayer), and they all can be played both with or without other players. There are also videogame genres built on the interaction between players. A striking example of such a video game genre is MOBA. MOBA is a subgenre of real-time strategy games in which two teams, typically consisting of five players each, compete against each other, with each player controlling a single character (Cantalops & Sicilia, 2018).

In both cases, not only the dialogue with video games but also the dialogue between players is interpreted by a player. In the first case, interpretation without considering other players is possible, while in the second case, interpretation is focused on other players’ actions more than on a videogame itself. Such video games can be useful when competitive activities are needed in the education process. They also can be built for checking skills and knowledge, but they can facilitate studying through the players’ interaction, which can consist in both helping and competing with each other. This can be profitable for learning because students, on the one hand, would have the possibility to see their mates’ results and, on the other hand, these results would be perceived not as a failure, but as a temporary loss, which shows the need to study. Such video

games, therefore, teach students not to be afraid of mistakes but to cope with them in the process of learning.

The fourth type of interaction is *player-community-videogame interaction*. In this case, the interaction between a large number of players who are present in the videogame at the same time occurs. The difference between this case and the previous one lies in the fact that in such videogames, the player interacts with a big in-game community, in-game culture, economics etc., built on the basis of the videogame world and mechanics. A striking example of such interaction that can be effectively used for educational purposes is the so-called MMORPG genre. Massively Multimedia Online Role-Playing Games, or MMORPGs, are virtual online gaming platforms based on software that allows players to interact with a vast number of other players at the same time (Subirana, Cabañas, & Ortiz, 2007) in the virtual environment with its unique conditions. In MMORPGs, players can

do quests, communicate with each other, have their own in-game space, receive awards, read in-game books that expand players' knowledge about the game world (as, for example, in the case of "The Elder Scrolls Online") etc. In such video games, the developed economy can usually be seen due to the existence of in-game currency. There are also in-game trade guilds, fight clubs and small parties which can be allies or foes and which form in-game politics. In the case of such videogames, the player's interpretation is conducted mostly through interaction with different representatives of the game community. It is possible to play alone to some extent. However, there are awards that can be received only with other players' help. These video games need so-called technical dialogue the most. Some of them are built on this type of dialogue.

The correlation of all described cases is illustrated by Fig. 1, from which we can see that there are cases on the edge of two interactivity kinds:

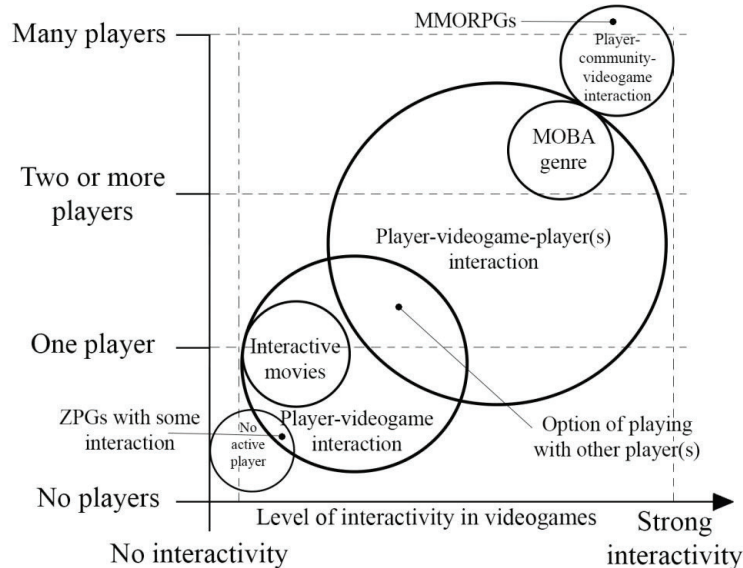


Figure 1. Correlation of videogames with different types of interactivity according to the number of players.

The highest level of both interactivity and communication existing in a videogame from the considered cases can be observed in

MMORPGs. This type of videogames creates many opportunities for the establishment of virtual educational space, which can be much more

complex and interesting for students than existing e-learning platforms. MMORPGs can be used to create a virtual network of classrooms, models, in-game libraries and other virtual places useful for teachers. The attempts to create such multiplayer games can be observed. However, they are not widely used due to their limitedness of mechanics, which reduces them to multiplayer games with several players, but not MMOs. For example, “ClassCraft”, an education game, is built on several features used by RPGs (character classes, in-game quests etc.), but it is played in teams of five players and gamifies the educational process instead of building it on the basis of videogame in its broader sense.

Not only MMORPGs but also other videogames can be integrated into the educational process wider than is proposed by researchers who consider the impact of videogames on education. In studies of videogames as a means of education, the following specific features and processes inherent in videogames are distinguished to demonstrate the sphere of the use of videogames in education:

- Videogames are considered through the prism of learning new approaches to the world; participating in social activities; preparing for new ways of learning and solving problems through specific resources; the active process of critical learning (Lacasa, Méndez, & Martínez, 2008);
- Such mechanics as choices and feedback are distinguished; additionally, videogames can motivate for learning (Kinzer et al., 2012);
- Videogames are interactive, practically-oriented environment, which creates the immersive experience (Mitchell & Savill-Smith, 2004);
- Videogames can be used as research tools; they attract participation, assist in setting goals and providing feedback, they are fun and stimulative etc. (Al-Azawi, Al-Faliti, & Al-Blushi, 2016).

However, most of these works do not consider such a fact that (especially with the growth of interactivity) videogames are built on teaching

and learning, and this connection of videogame mechanics with learning makes them a tool for gaining knowledge more than all demonstrated features because many of them are based on this similarity. Because of underexploring this similarity, the use of videogames in education leads to losing the essence and attributes of interactive gaming activities by videogames; therefore, “videogames” used and designed for educational purposes become only a didactic means without playability (González Sánchez, Padilla Zea, Gutiérrez, Cabrera, & Paderewski, 2008). Learning through games is generally described as a process with active participation that provides immediate feedback (McClarthy et al., 2012), but it also does not reveal full specifics of game mechanics’ similarity to the educational process.

This relationship, however, can be described with the help of understanding the gameplay as learning, therefore tracing similarity between education and videogames. Such similarity is briefly described by C. Fabricatore (2000), who reveals four stages of gameplay unfolding that are similar to learning processes. The first stage is collecting information about the game world. This information is usually related to the context of the game and game mechanics. However, there can be extra information that is useful not in terms of the game but in other cases. The second stage is the analysis of gathered information. After that, the player should make decisions based on gathered and analyzed information. These decisions are usually based on video game rules and the environment of the video game world. The last stage is the action itself, and this action is usually based on previous stages of interaction and interpretation of the videogame world. Not all video games can be described in such a way due to the fact that this internal learning process strengthens with the increasing level of interaction. In ZPGs, there is no need for decision-making; however, the player can still act as the interpreter of the monologue given by the game; and, in the case of MMOs, the described process is complicated by the need

to learn not only how to interact with the videogame world, but also how to communicate with in-game communities that constitute its important part.

The learning process usually consists of similar stages (collecting new information, analysis, synthesis and acting/decision-making during exams or practical lessons). In the case of videogames, in-game learning is even more important than in the case of classic games because, in a virtual game environment, the player should study not only game rules, which delineate winning and losing conditions, and possible in-game actions, which sometimes can be changed in the process of communication with other players, but also the ways of possible interaction with a videogame (e.g. which in-game objects can be used by player's character, which of them can be combined, which NPCs can talk to a player), which, on the one hand, limits the player "physically" in the framework of a videogame world, and, on the other hand, facilitates acquiring skills and perceiving the information received in the process of playing.

Conclusion

Through the analysis of videogames from the point of view of communicative and hermeneutic approaches, the specific features of videogames in communication and education have been distinguished. The hypothesis that the dialogue of players within the videogame, their interpretation of it and, accordingly, the further use of videogames for educational purposes differ in accordance with the level of interactivity has been proved through the consideration of different types of in-game dialogue and their impact on interpreting videogames. While different types of dialogue are combined in videogames, which leads to the complexity of communication within them, the interaction and, therefore, interpretation can be divided into four types: interaction with no active player, player-videogame interaction in case of one-player videogames, player-

videogame-player interaction and player-community-videogame interaction. The last type, especially the particular MMORPG genre, has demonstrated high potential for further use in education. The dependence of the difference in communication and interpretation not only on the number of players but also on a videogame genre has been traced during the analysis of different cases of videogames within one type of interaction. The similarity of video games to the educational process has also been revealed through considering the stages of gameplay and learning. This increases the usefulness of videogames for educational purposes; such consideration of videogames not as separate units for increasing motivation and providing feedback, but as complex platforms with previously prepared tools and mechanics for learning may facilitate online learning and make it more complex.

It can be concluded that there is a need for a comprehensive study of the specific features of each of described types due to the significant differences in the dialogue and educational potential of videogames belonging to them, delineated in this article because trying to unify the approach to studying videogames, the important characteristics rising from this difference can be lost and videogames can be reduced to one type of interaction, which leads to the further misinterpreting this phenomenon of the contemporary society and culture.

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