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The Problem of Sociological Research of the Game as a Social Phenomenon

1. Introduction

The challenges of postmodern society, which sociology now faces, are complicated by the failure to set applied tasks in a specific discipline to meet them. Individual sociological paradigms involve narrow tasks, and thus, a researcher has little choice but to specify the phenomenon in the context of a particular paradigm and take methodological criticism on the part of the supporters of another paradigm. In some cases, that state of affairs can significantly hamper the institutionalization of academic disciplines. In the author's opinion, the sociology of games in this context is one of the widest directions which are in the same position. The game as a social phenomenon and an object of the sociology of games remains complex for theoretical development.

According to the author, the multiparadigmality of the very sociology is a key factor preventing the active institutionalization of the sociology of games which results in failure to operationalize high-level categories, such as the category of game. Under the framework of different concepts, the game phenomenon is between the key factor of social organization and the core principle of social effect, as well as a private form of entertaining.

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The traditional question which hinders the conceptualization of the game amidst the discipline's paradigmality is as follows: What is the game, and what is not the game? It seems that the typification of available games can be commenced with their analysis, but the phenomena which can be categorized as games differ in various paradigms. The complexity to define something as a game is even higher than the complexity to answer the central question of sociology. No matter how challenging to operationalize the concept of "society", researchers can at least agree on what society is not. In the case of the sociology of games, the beforementioned is impossible. A range of oppositions, which the author considers below, supports the scope of operationalization of the game category.

2. Fundamental oppositions in operationalizing the category "game" in sociological knowledge

The first opposition: The game is a phenomenon of consciousness / The game is a phenomenon beyond consciousness. The European thinker J. Huizinga writes the following on the subject: "Since the reality of play extends beyond the sphere of human life it cannot have its foundations in any rational nexus, because this would limit it to mankind"². The idea that the game is a phenomenon beyond consciousness remains fundamental for developing a series of general theoretical constructs. For instance, the hermeneutic interpretation of human cultural experience regards the game as an unconditional phenomenon beyond consciousness, the formation of which happens without a man as a subject of the game. H.-G. Gadamer writes: "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. What holds the player in its spell, draws him into play, and keeps him there is the game it. This is shown also by the fact that every game has its own proper spirit³. The game in Gadamer's conceptual framework is based on the

 ² Hëjzinga J. (2011). Homo ludens. Čelovek igraûŝij. [Homo ludens. Playing man].
St. Petersburg: Izdatel'stvo Ivana Limbaha. P. 12. [in Russian]

³ Gadamer H.-G. (1988). Istina i metod: Osnovy filosofskoj germenevtiki. [Truth and method: foundations of philosophical hermeneutics]. Moscow: Progress. P. 78. [in Russian]

hermeneutic analysis of human experience and has a non-applied nature of the free movement.

The phenomenological tradition arises from other preconditions: the game is "... is not only a kaleidoscope of playing acts but, first of all, the primary way of human communication with impossible and unreal"⁴. From the perspective of the game as an anthropological phenomenon, it can be an attribute exclusively provided with human consciousness. The fact that animal game, human game, or game as a whole is a phenomenon of the same order or, on the contrary, is hard to be verified. At first sight, one can believe that this opposition is irrelevant to the subject matter of sociology in general and the sociology of games in particular. In fact, this opposition influences the degree of generalization of the game category under which a specific social phenomenon or a form of human activity can be attributed to play. There is no doubt that animal and human games have both similarities and essential dissimilarities. Thus, the typification of game forms can be substantially different depending on whether we attribute the game to the phenomenon of consciousness or consider it beyond.

The following one – a realistic approach to defining the game / a nominalistic approach to defining the game – relies much on the structure of the beforementioned opposition. The acuteness of the irreconcilability of nominalism and realism in solving the problem of categorization of the game is extremely high. In other words, in terms of game categorization, the opposition's essence involves "taking off the table" some constructions established in everyday living or scientific idea in case of a nominalistic approach and including ones in the research subject in case of realistic. Thus, every day and scientific discourse contains such phrases as "word play", "political game", "language game", etc. The category's scope highly complicates the conceptualization of concepts. At the same time, some European languages suggest distinguishing two different categories in that part where other languages fix the one. For instance, the English language proposes to use "game" or "play" under

⁴ Fink É. (1988). Osnovnye fenomeny čelovečeskogo bytiâ. Bytijnyi smysl i stroj čelovečeskoj igry. [Basic phenomena of human existence. Existential meaning and structure of human play]. Problemy čeloveka v zapadnoj filosofii. Moscow. P. 361. [in Russian]

various social conditions, while the Ukrainian language equally characterizes them as "rpa"⁵.

The third opposition, which is discussed in terms of the game's essence, can be described more simply as follows: the game is free activity / the game is not free activity. Be referring to the theoretical contribution by J. Huizinga, the author finds out that game is exclusively free activity. The scientist writes: "First and foremost, then, all play is a voluntary activity. Play to order is no longer play"⁶. Absolute freedom of action within the game is one of the key game attributes that underlie such "playing" of cultural life under which such complex institutions as law, science, state, etc. are established. However, from the standpoint which primarily regards the game as the phenomenon confronting reality. J. Baudrillard also notices confrontation between the game and freedom. "Games do not obey the dialectic of free will, that hypothetical dialectic of the sphere of the real and the law. To enter into a game is to enter a system of ritual obligations. Its intensity derives from its initiatory form – not from our liberty, as we would like to believe, following an ideology that sees only a single, "natural" source of happiness and pleasure. The game's sole principle (...) choosing the rule one is delivered from the law"⁷. In that part where Huizinga's freedom of the game is a basis for creating human culture, Baudrillard's unfree game conflicts with reality by changing the laws of reality to game rules.

The fourth opposition, which is mentioned above, touches upon the categories which reduce themself to a lack of a game. The traditional scientific approach for solving challenging tasks by a reversal of logic while categorizing the game remains unproductive. Depending on references, which serve as a basis for a particular concept, everything that is the opposite of playing is characterized ambiguously as well as everything that is full with its presence. The scientist R. Caillois writes: "A characteristic

⁵ Kutas É. (2012). Igrovaâ deâtel`nost` vzroslyh: "game" i "play". [Game activity of adults: "game" and "play"]. Aktual`nye problemy sociolizacii molodëžy. Minsk: BGU. [in Russian]

⁶ Hëjzinga J. (2011). Homo ludens. Čelovek igraûŝij. [Homo ludens. Playing man]. St. Petersburg: Izdatel'stvo Ivana Limbaha. P.14. [in Russian]

⁷ J. Baudrillard (2000). Soblazn. [Seduction]. Moscow: Ad Marginem. P. 123 [in Russian]

of play, in fact, is that it creates no wealth or goods, thus differing from work or art"⁸. However, for instance, postmodern society puts forward a series of videogames by playing in which participants can capitalize on their achievements. The very surrounding reality of the modern social world points us to the fact that the opposition between play and utility in the postmodern is becoming less obvious. Functionally, a game can be a factor of the realization of the player's needs and cannot always be opposed to utilitarian activities.

In particular, one of the most studied phenomena in biosocial sciences in recent years is a computer game (according to the author's opinion, the category "videogames" is the most suitable in this case) has a bulk of advantages that can fully support utilitarian processes of socialization, combating depression, acquiring new skills and knowledge, etc. In terms of the conducted experiments, the subject of which comprised various video games, the researchers draw attention to the feature of 3D games to improve spatial memory, which facilitates human orientation in a changing environment at the physiological level⁹. Studying the 3D environment can serve a man as a qualitative alternative to communication with the outside world that positively influences memory functions and can be practically used in a modern city.

In another study, researchers from the University of Auckland designed a SPARX video game (smart; positive; active; realistic; X-factors thoughts) which consists of 7 levels. It was used to treat depression in a study group of teenage kids. As part of the game, teenagers created their heroes, completed levels, battled against their depressive thoughts and negative emotions, and learned the principles of interpersonal communication. The group showed treatment outcome similar to the traditional depression treatment in psychotherapy¹⁰.

⁸ Kajua R. (2007). Igry i lûdi. Stat`i i éssé po sociologii kul`tury. [Games and people. Articles and essays on the sociology of culture]. Moscow: OGI. P. 45. [in Russian]

⁹ Clemenson G.D., Stark C.E.L. (2015). Virtual Environmental Enrichment through Video Games Improves Hippocampal-Associated Memory. The Journal of Neuroscience, December 9. P. 16116 – 16125 [in English]

¹⁰ Merry S., Stasiak K., Shepherd M., Frampton C., Fleming T., Lucassen M. (2012). The effectiveness of SPARX, a computerised self help intervention for adolescents seeking help for depression: randomised controlled non-inferiority. The BM-J2012;344:e2598. [in English]

In addition, the group of researchers from different universities of the world conveyed the review of 38 medical articles which, by relying on research findings, determine cumulatively 195 types of therapy to improve human health using video games. Such games are a part of physical therapy (e. g. in stroke recovery), psychological therapy (e.g., in treating post-traumatic stress disorder), an increase of physical activity, health studies, and delivering care in case of self-treatment¹¹.

However, such the game phenomenon as gambling can serve as a factor of strong addiction due to which passion for gambling games (F63.0) is included in the International Classification of Diseases (ICD). E. Goffman states that social activity is based on the gambling principle in terms of human consciousness. A person feels life flow in risk situations with the dubious result that requires increased attention than, for example, "Russian roulette", which is the most active social act. That sort of paradox results in the fact that the game has a vague and blurred position towards utilitarian activities and, in some situations, is rather a functional and quite practical phenomenon or is the basis for social action¹².

The above oppositions in defining the game are not exhaustive. However, amidst the described conditions, a researcher, who studies the game as part of sociology, distinguishes a range of problems. Researchers meet the challenge of setting an applied task and specifying the object of the sociology of games. As a result, there appears a need to institutionalize the sociology of games, taking into account that the branch of sociology cannot attribute the category having the level higher than the category of the object of sociology itself to research object. In the author's opinion, the existing situation is triggered by some researchers and theorists who keep insisting on game purity and the applicability of this category in sociological discourse. A pure game is more like the object of social philosophy as it is a concept that takes a lot to operationalize in sociological categories. In addition, a postmodern society with its processes of gamification, revolution of videogames, phenomena of

¹¹ Primack B.A., Carroll M.V., McNamara M., Klem M.L., King B., Rich M., Chan C.W., Nayak S. (2012). Role of video games in improving health-related outcomes: A systematic review. American Journal of Preventive Medicine. PP. 630–638. [in English]

¹² Goffman E (1967). Where the Action Is. Interaction Ritual: Essays on Face-to-Face Behavior. New York: Panteon Books. P. 149–270.

augmented reality, and stimulation games – in fact, with the processes of ubiquitous gamification – doesn't transform everything in the game. Successful cases of introducing game components into business, education, research activity, etc. don't turn these institutions into a pure game by leaving the key elements of their structures, tasks, and the functional load of constituent elements as they are. First of all, the gamified business process continues to be a business process.

In addition, play is a bivalent category as, from the perspective of human communication, it reserves paradox mentioned by G. Bateson: "We face two peculiarities of play: a) that the messages or signals exchanged in play are in certain sense untrue or not meant; and b) that which is denoted by these signals is non-existent. ... Play is a phenomenon in which the actions of "play" are related to, or denote, other actions "not-play". We therefore meet in play with an instance of signals standing for other events, and it appears, therefore, that the evolution of play may have been an important step in the evolution of communication¹³. The substitution of events with other events highlights the functional load of play during the evolution of symbolic experience. According to R. Barthes's categories, one or another play acts as a second-order semiotic system, which evolutionary origins much earlier than "the first-order" (that is no less paradoxical) as symbolic exchange in play is a permanent attribute of animal games. "Play may arise only in case if it engages the organisms which have been good at some metacommunication, namely, the exchange of signals, which would transmit "This is play"¹⁴.

The situation became complicated in "postmodern games". Thus, for instance, S. Kravchenko puts forward the concept of gamification of society as "a way of experiencing the reality which provides for the convergence of game activity and culture¹⁵. By exemplifying gamification,

¹³ Bateson G. (1955). A Theory of Play and Fantasy. Psychiatr Res Rep Am Psychiatr Assoc. PP. 69–71. [in English]

¹⁴ Bateson G. (1955). A Theory of Play and Fantasy. Psychiatr Res Rep Am Psychiatr Assoc. PP. 69. [in English]

¹⁵ Kravčenko S.A. (2002). Igraizaciâ rossijskogo obŝestva (k obosnovaniu novoj sociologičeskoj paradigmy). [Playfication of russian society (to update a new sociological paradigm)]. Obŝestvennye nauki i sovremennost`. Moscow: Nauka. PP. 143–155. [in Russian]

Kravchenko brings forward the following argument: "Persons who have something to do with science, culture, play as academicians (...) given that sociologists acknowledge the degradation of the social layer of Russian intellectual society"¹⁶. However, in this case, we can discuss both gamified interaction and simulations. Following communication theory, the original bivalence of play doubles, and we are led to the bivalence of bivalence. The former involves replacing a real event with a fictional signal, and the latter involves lacking the realm of the real event. J. Baudrillard regards the latter ambivalence as the differentiation between play and simulation¹⁷. In this context, the author states that the ambiguity of play significantly complicates our understanding at the level of a scientific category.

3. Game attribute as a research object

Summarizing the abovementioned, one can mark that in sociological analysis, the game category is compound, ambiguous, and vague. As part of humanities, there are many complex oppositions to the concept of the game, which are difficult to attribute to the object of such a discipline as the sociology of games (as a result, philosophy contributes most to theorizing the game). It is obvious that the category of the game remains non-operating in current conditions. More customized categories (video games, game addiction, gamification, etc.) become the object of sociological researches. Thus, it is created a situation in which the statement of root problems of the sociology of games without specifying the subject does not allow a researcher to set applied tasks, and the applied tasks as part of the study of educational, sports, and video games can only be conditionally attributed to the object of a particular discipline. At the same time, the rhetorical argument about attributing all the mentioned phenomena to the object of one discipline is still poor.

¹⁶ Kravčenko S.A. (2002). Igraizaciâ rossijskogo obŝestva (k obosnovaniû novoj sociologičeskoj paradigmy). [Playfication of russian society (to update a new sociological paradigm)]. Obŝestvennye nauki i sovremennost`. Moscow: Nauka. PP. 146–147. [in Russian]

¹⁷ Baudrillard J. (2000). Soblazn. [Temptation]. Moscow: Ad Marginem. P. 123 [in Russian]

In view of that context, the author believes that such a specified phenomenon as an object, which is attributive both towards the game and any form of playing interaction, can contribute to the institutionalization of the sociology of games. The author proposes to use the category "game attribute", an attribute of playing interaction, as the relevant object. Such an approach has some advantages and facilitates detecting fresh positions for theorizing game. First of all, attributes of playing interaction amidst the multidisciplinarity of sociology can be marked in the structure of any social phenomenon, which may be attributed both to game and non-game in terms of a particular paradigm. Under such a framework, the abovementioned key opposition of humanities defining "what is game / non-game" becomes irrelevant to a researcher. It refers to a certain degree of gamification of a phenomenon or a game component in different interaction forms, the analysis of its influence on interaction, position in the structure of interaction, symbolic meaning, functional load, etc. For instance, a lack of causal relations with objective reality can act as a game component. This characteristic is used to create a sort of "safe environment", the importance of which increases in the course of complication of objective reality. Making a mistake under such conditions doesn't lead to negative consequences but, on the contrary, allows playing interaction by accumulating information and skills in a safe environment. This property underlies the institution of education: it is manifested in military exercises, training, rehearsals, volunteering, etc. The aggression of a player doesn't exceed the scope of playing interaction, tactical miscalculation during military exercises manages without real victims, miscalculations of loading of building construction in the context of a university class don't cause the building's destruction - these are examples which have evolved within the existing social system, but the sociology of games allows an applied study of a new safe environment, in which such components have not been used yet, through the prism of attributes of playing interaction.

In addition to the abovementioned, the sociology of games comprises the discourse on the reasons for the manifestation of game components in one environment and their lack in another. For instance, external attributes of engaging in interaction, which may be conditionally marked as "mask", can act as a game component. In modern Ukraine, many complex institutions, which shape objective reality: judiciary, healthcare system, military and security services of the state, army, etc., are provided with mask's properties. However, there are institutions which lost that property during the social progress as well as those which have never had it. From the perspective of a game component, a researcher can set a series of profound scientific tasks to study the same structure of social institutions.

Second, a game component as an attribute of the game and an object of the sociology of games makes it possible to build an interdisciplinary paradigm. Game properties remain more understandable and applied categories of some disciplines which deal with human issues. The relevant cases of applying videogames in physiotherapy, psychotherapy, and neurology have been mentioned above. Moreover, in the author's opinion, key structural factors of such games are not represented by visual stimulation but a range of game components which form the playing environment, that is also supported by the studies¹⁸¹⁹. For instance, the fact that neurology indicates the functional load of a videogame as a method of fighting against depression has become the basis for theorizing in the sociology of games as attributives of playing interaction are instrumental in the struggle against depression. Such a game component as a "game goal" is a determinant of game dynamics. At the same time, the game component is constantly applied when developing gamified systems. In the above cases, a "game goal" has led to real results. For example, the targeted virtual struggle of a teenager's avatar against the same virtual factors of depression leads to the outcomes of real psychotherapy²⁰. The "game goal" is found in a range of gamified Internet resources that encourage people to keep a healthy lifestyle (www.fitocracy.com is one of them). The goal of the player's social ac-

¹⁸ Cole S.W., Yoo D.J., Knutson B. (2012). Interactivity and Reward-Related Neural Activation during a Serious Videogame. PLoS ONE 7(3) [in English]

¹⁹ Kokkinakis A.V., Cowling P.I., Drachen A., Wade A.R. (2017). Exploring the relationship between video game expertise and fluid intelligence. PLoS ONE 12(11). [in English]

²⁰ Merry S., Stasiak K., Shepherd M., Frampton C., Fleming T., Lucassen M. (2012). The effectiveness of SPARX, a computerised self help intervention for adolescents seeking help for depression: randomised controlled non-inferiority. The BM-J2012;344:e2598. [in English]

tion is not utilitarian monotonous activity on the physical development of his own body but the achievement of a high result in the system of PBL-components (points-badges-leaderboards). Moreover, a player who participates in virtual duels using that sort of resource and collects a certain number of points or strives for obtaining a particular game status (badge) is involved in the physical development of his own body in the context of life "out of the game".

4. Conclusion

Thus, in the context of sociological knowledge, the gamification practice in postmodern society almost completely dismisses A Schütz's thesis "one that is compatible within P province of meaning will never be similarly compatible within Q province of meaning. Compared to P, which is considered real, Q and all related experiences seem strained, inconsistent, and incompatible, and vice versa^{"21}. Under present-day conditions, a person becomes one who consciously takes an opportunity of converting the experience or skills of one world into the experience or skills of another. The close interaction of the worlds in which a man fulfils his potential may not be a characteristic feature of a postmodern man, but it seems to be a postmodern trend. In this context, such a discipline as the sociology of games acquires extra authority and significance. According to the author, the study of the way scientific knowledge can be imparted from one participant of the game to another without direct interpretation would become one of the fundamental researches for the entire sociology.

The above possibilities, which the sociology of games opens up through operationalizing its subject as an attribute of playing interaction, are not exhaustive in one form or another. One can recall the active institutionalization of a discipline (a strict applied discipline is institutionalized more actively as it provides for the intensive collection of empirical data and thus, the building of theoretical structures, new social practices, and, as a result, accelerates the "feedback" for researchers), extension of methodology (the array of sociological methods that can be used to

²¹ Šûc A. O množestvennosti real`nostej. [About multiplicity of realities]. Sociologičeskoe obozrenie, tom 3, #2. Moscow. P. 18 [in Russian]

study game components of various activities is broader than when one thoroughly studies the game as an individual phenomenon), extension of the framework of concepts and categories (a game component as an attribute of playing interaction includes the need for definitions that are already actively used in gamification: game mechanics, game tempo, game rhythm, game card, etc.). It is possible to classify and systemize game components. The principles of that systematization may become a basis for a new paradigm of the sociology of games, which may have a considerable influence on the entire sociological knowledge as well.

References

- Bateson G. (1955). A Theory of Play and Fantasy. Psychiatr Res Rep Am Psychiatr Assoc. PP. 69–71. [in English]
- Bodrijâr Ž. (2000). Soblazn. [Temptation]. Moscow: Ad Marginem. P. 123 [in Russian]
- Clemenson G.D., Stark C.E.L. (2015). Virtual Environmental Enrichment through Video Games Improves Hippocampal-Associated Memory. The Journal of Neuroscience, December 9. P. 16116 – 16125 [in English]
- Cole S.W., Yoo D.J., Knutson B. (2012). Interactivity and Reward-Related Neural Activation during a Serious Videogame. – PLoS ONE 7(3) [in English]
- Fink É. (1988). Osnovnye fenomeny čelovečeskogo bytiâ. Bytijnyi smysl i stroj čelovečeskoj igry. [Basic phenomena of human existence. Existential meaning and structure of human play]. Problemy čeloveka v zapadnoj filosofii. Moscow. P. 361. [in Russian]
- Gadamer H.-G. (1988). Istina i metod: Osnovy filosofskoj germenevtiki. [Truth and method: foundations of philosophical hermeneutics]. Moscow: Progress. P. 78. [in Russian]
- Goffman E (1967). Where the Action Is. Interaction Ritual: Essays on Face-to-Face Behavior. New York: Panteon Books. P. 149–270.

Hëjzinga J. (2011). Homo ludens. Čelovek igraûŝij. [Homo ludens. Playing man]. St. Petersburg: Izdatel'stvo Ivana Limbaha. P. 416. [in Russian]

Kajua R. (2007). Igry i lûdi. Stat`i i éssé po sociologii kul`tury. [Games

and people. Articles and essays on the sociology of culture]. Moscow: OGI. P. 45. [in Russian]

- Kokkinakis A.V., Cowling P.I., Drachen A., Wade A.R. (2017). Exploring the relationship between video game expertise and fluid intelligence. PLoS ONE 12(11). [in English]
- Kravčenko S.A. (2002). Igraizaciâ rossijskogo obŝestva (k obosnovaniu novoj sociologičeskoj paradigm). [Playfication of Russian society (to update a new sociological paradigm)]. Obŝestvennye nauki i sovremennost`. Moscow: Nauka. PP. 143–155. [in Russian]
- Kutas É. (2012). Igrovaâ deâtel`nost` vzroslyh: "game" i "play". [Game activity of adults: "game" and "play"]. Aktual`nye problemy sociolizacii molodëžy. Minsk: BGU. [in Russian]
- Merry S., Stasiak K., Shepherd M., Frampton C., Fleming T., Lucassen M. (2012). The effectiveness of SPARX, a computerised self help intervention for adolescents seeking help for depression: randomised controlled non-inferiority. The BMJ2012;344:e2598. [in English]
- Primack B.A., Carroll M.V., McNamara M., Klem M.L., King B., Rich M., Chan C.W., Nayak S. (2012). Role of video games in improving healthrelated outcomes: A systematic review. American Journal of Preventive Medicine. PP. 630–638. [in English]
- Šûc A. O množestvennosti real`nostej. [About multiplicity of realities]. Sociologičeskoe obozrenie, tom 3, #2. Moscow. PP. 3–34 [in Russian]

Summary

In studying the game as a social phenomenon, it is often difficult to leave the sociological approach within the scope of scientific knowledge. This happens due to the multiparadigmality of sociology and, therefore, a range of oppositions in the definition of the game. The role of consciousness in the game, the relationship between the concepts of game and freedom, a whole series of scientific categories (language game, wordplay, political game), which were introduced in the conceptual and categorical framework of some scientific disciplines, pose a difficult task for sociologists to conceptualize and study the game phenomenon.

In terms of the article, the author puts forward the category "game attribute" as an element of game interaction. It is suggested that an attribute of game interaction to be included, systematized and classified in such a category. This

approach to the theoretical development of the game phenomenon allows researchers to set a wide variety of applied problems, stimulates the advancement of an interdisciplinary paradigm in the sociology of games, and potentially can contribute to its institutionalization.

Keywords: game component, game interaction, game category, sociology of games, game and play in sociology, analysis of categories, postmodern