The article presents an ontological analysis of games. In every game one could distinct four constitutive elements: players, game rules, material substratum of the game and intentional world of the game. The last element corresponds with make-believe quality of games. These are two kinds of acts of playing (creating the world of the game): performative and kinetic. The article presents an analysis of these two kinds of acts of playing and presents the division of games (performative-based/kinetic-based) which is ontologically fundamental and sets two radically different groups of games. Kinetic games are based on physical, kinetic aspect of the player’s bodies and material tools they use in the game. Performative games are based on transmission some pieces of information. This division enables us to indicate some non-trivial facts about games, like implicit presence of laws of physics in kinetic games or double character or rules in performative games. Interesting fact is that although these two groups of games are very different in the terms of kinds of acts of playing (and also kinds of effort connected with these acts) there is at least one performative-kinetic hybrid game – chessboxing.

Key words: classification of games, games rules, ontology

INTRODUCTION: THE SUBJECT, PURPOSE, METHOD AND SURVEYED MATERIAL

The purpose for these considerations is to analyze some basic ontological problems connected with games. The complicated phenomenon of game can be considered in many different ways; ontology considers game as a phenomenon of a particular being structure.\(^\text{1}\) It is important to indicate that the game is a sort of creation of human’s activities. In his dissertation ‘About Activities And Creations’, K. Twardowski presents a range of pairs of

\(^{1}\) I omit the aspects of games connected with competition and cooperation of players which are researched by the formal (mathematical) theory of games.
words, in which the first word means the activity and the other one the creation that occurs as a result of this activity. These pairs are among others: speak – speech, think – thought. However, Twardowski’s specification lacks such pair as play – game. Explanation of these two terms is the main subject to considerations presented below and at the same time apart from Twardowski’s considerations I base my course of thinking mainly on Ingarden’s ones: his distinction into real (material) and intentional things, typology of real being and considerations concerning ontology of chess. Twardowski divides all creations into psychical and physical ones, and among the physical creations he also distinguishes the psychophysical ones. On the other hand, there are no intentional creations in Twardowski’s conception. This category would mean such creations which being kept in existence by proper acts of conscious subjects, are inter-subjective thanks to being based on material objects. Using the ontology of chess by Ingarden I analogically create a general ontology of games (in my attempts to generalize this ontology to all sorts of games I apply the phenomenological method and terminology elaborated by Ingarden). I also use the theory of performatives by J. L. Austin, which is transferred to the acts of game, therefore I’m trying to mix some methods of classical phenomenology and linguistic phenomenology. General character of these considerations prevented me from focusing on any particular group of games.

CONSTITUTIVE COMPONENTS OF THE GAME

Among varied groups of meanings of the term ‘game’ I would like to focus on the group connected with ‘playing games’. I am still interested in those uses of the words game, playing, to play etc. where we can talk about creation of some ‘game’. We can play something (some game), play with something (i.e. with figures, ball, racket, head), play with someone (with partners) etc.

Let the expression someone plays something be our starting-point. The first part – someone – is a player who plays, which means who performs an activity. The player has to know the rules of the game what allows him to display a special world, the world of the game to himself, he also has to interfere in this world using some acts – which means to play, for this purpose he has to use some objects, accessories of the game. Developing this thought we gain the following set of elements that are crucial for the ontology of games – the phenomenon of game consists of four elements:

1. The players

The players (competitors):
- are able to understand the rules of the game;
- are able to constitute an intentional but intersubjective world of the game, with the power of intentional acts of consciousness they create a field on which the game is

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2 On the margin of fundamental ontological considerations Ingarden indicates chess (as well as other games of this type, however, he does not indicates what this type exactly is) as an example of beings of intentional character. The meaning of chessmen is ambiguous – as material objects, i.e. wooden accessories, they are a material basis of the game, whereas as chessmen sensu stricto they are intentional beings. Expanding this issue I implement distinction between the material substratum of the game and intentional world of the game. I also use Ingarden’s considerations concerning inconstant structure of the chess game. Compare to R. Ingarden, Spór o istnienie świata, v. II., part 2, 92–100.
played. I call these acts the acts of creation or constitution of the world of the game. Except for the players these acts are also fulfilled by the audience and referees\(^3\). – are able to take the active part in the world of the game – the players are not only the witnesses but also actors of the game, agents. This participation consists of performing some acts, activities, which I call the acts of participation in a game. These activities are sort of interference in the world of the game, a way of steering some elements of this world. An essential division of the games in a consequence of how the acts of participation and interferences in the world of the game were divided (as we will see below – there are two kinds of such acts).

2. Rules of the game

Rules of the game, norms, which define the game, depict a scheme of the world of the game. It is necessary to know them while creating the world of the game.

3. World of the game

World of the game is an intentional, internally variable world created by the players on the basis of rules and the material substratum of the game.

4. Material substratum of the game – tools

Material substratum of the game includes all the material items connected with the game (i.e. players’ bodies and dresses, stadium, chessboard with chessmen, sounds like whistle etc.).\(^4\) What elements of the material substratum of the game are involved in the world of the game is indicated by the rules of the game, which are a specific sort of agreement enabling constitution of the inter-subjective world of the game. This world usually includes only kinetic or actually the level connected with time and space of the material substratum. The rules also define, what pieces of material world can be the substratum of the game. The material substratum of the game is partly excluded from the rest of a world, so it is a relatively isolated system what can be noticed in a ‘laboratory’ tendency to isolate the arena of some (especially kinetic-based) sports. Essential ontological fact is that the world of the game, the exact stage of struggles between players – participants of the game, is an intentional object, different from the material substratum of the game\(^5\). The phenomenon of alternating the fields of existence – intentional and material world – determines the complexity of the ontological structure of games. At least, we have to assume existence of a dualism – alternation of the material (real) world which is a basis for the game with the quasi-real (intentional) world of the game where different rules are in force. The mind, that constitutes the intentional world of the game on the basis of rules and the material substratum, is a link enabling such alternation of fields.

\(^3\) The perfect referee is compounded in the rules of the game, whereas the imperfect referee is one more player in the game, which means he interferes the course of the game.

\(^4\) In blind chess game there is no material substratum, but the images of the chessboard and chessmen plays the role of material substratum of the game.

\(^5\) J. Huizinga suggests that the world of the game is a field separated from the world, so do R. Ingarden, R. Caillois and E. Fink say.
CONTRIBUTION TO THE WORLD OF THE GAME –
PHENOMENOLOGICAL THEORY OF CONSTITUTION

World of the game, as every intentional object, is created by proper intentional acts of mind. Genetic phenomenology aims to discover the way of constitution of the world of the game. The fact, that the actual domain of the game is a set of intentional objects created on the basis of a group of material objects, makes us research the function running from the material objects to the intentional world of the game. Accessories are domain of this function (D) and elements of the world of the game are codomain (D*). I call it G (from the game) function. In order to understand the game, the material world or at least some pieces of it need to be ‘suspended’. There for as an initial condition we need ‘epoch’ – suspensions of standard rules of the material world interpretation. Perceiving the game as game is possible only thanks to the fact that the knowledge of rules in the acts, that constitute the world of the game, is a sort of a matrix which indicates the course of perception and understanding of the game. That is why, for a sport fan a running man is the left outside and moving a wooden figure on may be i.e. en passant, what looks completely different for a subject that does not know rules of the game or is not ready to perceive the game as game. As a sport fan I perceive such observer who aims to notice some specific qualities of the game. Therefore i.e. a physicist or a philosopher of sport, who analyzes some aspects of a given game, do not aim to perceive the qualities connected with the game as game.

REPARTITION OF GAMES ACCORDING
TO THE KIND OF THE ACTS OF PARTICIPATION
IN THE WORLD OF THE GAME

This repartition reaches the deepest, except for the players, elements of the game: world of the game, rules of the game and material substratum are different in these two types of games.

1. Performative-based games

Performative-based games are those games in which the interference in the world of the game is connected with making some declarations (performatives), ritual activities using some objects or strictly formalized statements. Examples of performative-based games: chess, bridge, 100-field draughts, go. If a given performative-based game is regarded as a sport (like chess in some countries) it can be defined as performative-based sport. We can also call this kind of games conceptual games.

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6 Acceptance of the world of the game’s rules may lead to a conflict with rules of the ‘material’ world (i.e. confusion that occurs as a consequence of ignoring limitations of the substratum of the game).
7 We can find a sort of analogy between an aesthetic approach and approach to see the game as game – intentional object.
8 According to this wide and not pejorative sense such observer-theoretician is not a sport fan but rather some sort of a ‘pseudo-fan’. Analogically, watching a hockey match and waiting for a struggle on the ice-rink has got little in common with perceiving the game as a game.
9 Name of these games refers to the theory of performatives by J. L. Austin, however, Austin’s theory touches some acts of speech, which if spelled, do not ascertain anything but make something. An in these considerations performatives are not only some statements but also particular gestures, moves etc.
In games of this kind we need some medium, which transports the information about an interference in the world of the game. Then the accessories that are used in the game become communication tools – such function is fulfilled by any fencing floors, cards, dice, pawns etc. They represent some fragments of the world of the game in accordance with rules of the game; they are only markers. We can say that G function in this case goes from the meaning of tools to intentional world of the game which consists of series of events.

Events in the world of the game are equivalents of particular performatives implementing modifications to this world. In the case of performative-based games the world of the game is inconstant, discreet, quantum, the game is limited to a series of events, what is then reflected in records of these games (i.e. recording of a chess game). Discreet character of the course of performative-based game is a result of existence of a doze, a quantum of sense in the act of playing. This ‘eventistic’ ontology of performative-based games is determined by the nature of the acts of participation in the game. Ontology of the world of the game in performative-based games is settled by rules of the game, however, there is one limitation – it has to be discreet.

The effort connected with performative-based games is connected mainly with analysis of the situation and strategy of the game. Usually quality of performing acts of participation in game – if it stays in agreement with regulations – does not influence the course of the game (i.e. it is not essential if the pawn will be placed on a given part of the square or on some other part of the same square). This act can be replaced by an equipollent act of different kind – instead of moving the pawn we can write down the coordinates of our move or say them loudly, the move itself as a part of the world of the game will not be changed.

In the case of performative-based games there are two kinds of rules – some of them define the world of the game (constitutive rules) and some describe how the acts of participation in the game, which means some elements of the material world, should be performed (I call them rules of proper performance, in contrast to the strict game rules – constitutive rules). An example of the second sort of the rules is ‘the touched chessman moves on’. It should be noted here, that in some performative games, like fast chess (blitz chess), due to the time limitation players have to perform this acts fast and very carefully at the same time.

2. Kinetic-based games

Kinetic-based games, non-performative, are those games in which interference in the world of the game takes place by performing some acts, which are not performatives and are processes that happen in the physical world, i.e. run, discus throw, hitting a ball etc. Examples of kinetic-based games: all Olympic sports; computer games defined as dexterous.

This sort of games may also contain some performative elements, however, it does not change the general character of these games. As performatives have got their equivalents in

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10 According to this ontology, course of the game can be symbolically written down in a complete form, where the symbols are equivalents of the content of performatives acts of participation in the game. For a complete course it is necessary to complete the recording with the information about time, where all the acts were undertaken, what is often omitted in the literature (e.g. concerning chess). Sometimes we can only find the information that a particular player was in procrastination. In the case of kinetic (non-performative) games such complete symbolic recording in not possible to create. Only some scheme of the course of the game can be displayed.
the world of the game of an event (and events are either beginnings or endings of processes), performative elements in the kinetic-based games usually mean beginning or breaking process of the game (i.e. sound of arbitrator’s whistle). Casual nexus between the acts of participation in the game and accessories’ actions plays an important role in this sort of games.

Physical laws are assumptive component of the rules of kinetic-based games. Theoretically, the full set of rules of the kinetic-based game should also involve the physical laws that regulate behavior of the world of the game’s substratum (more accurately: physical components of the material substratum of the game). Because of homogeneity of physical laws and physical constants it is, of course, omitted in the rules of games. Considering possible games, we can imagine different physical laws leading to different games, while rules of the game remain unchanged. Physical properties of accessories are essential for kinetic-based games, i.e. physical properties of a ball (weight, resilience) is important in the football match, but in chess it does not matter if a chessman is wooden or bony.

The way how the acts of participation in the kinetic-based game are performed is essential, although it might be involved in a complicated analysis. This is the reason why there are some specific effects in these games, like dissonance between the idea, intention and performance of the act of playing in the physical world. Pool might be an example of this situation: a beginner can elaborate a complicated cannon, however, the trajectory of the billing ball after his shot may occur completely different from the idea. Such duality does not take place in performative-based games, where the problem of performing act that interferes course of the game does not exist. A given move (i.e. in chess) can be good or bad, can fulfill the tactic purpose or not, but the way of carrying out the performative does not matter here and is neither barrier nor help in the realization of player’s idea. Dissonance between the idea and performance of the move and irregularity of the physical substratum takes place only in kinetic-based games.

In games of this sort the medium between the intentional world of the game and its material substratum is not symbolic but ‘literal’ – interference is based on the cause – consequence relation, not the meaning of performatives, like in performative-based games. And it is so because the move – term taken out of the world of the game – is based on physical, kinetic aspect of the player’s and tools motion. The G function in this case goes from some physical aspects of processes in material world to the intentional world of the game which consists of intentional processes.

Some basic results of presented analysis are shown in the table:

<table>
<thead>
<tr>
<th>World of the game</th>
<th>Acts of participation in the world of the game</th>
<th>Rules of the game</th>
<th>Material substratum of the game</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinetic-based games</td>
<td>Continuos process based on some kinetic properties of material objects</td>
<td>Movements of players’ bodies in real space-time; Physical laws are a constructive element of the rules of this games</td>
<td>Players’ bodies, stadium etc.</td>
</tr>
<tr>
<td>Performative-based games</td>
<td>Range of events in discreet quasi-space-time</td>
<td>Transmission of information carried by performatives</td>
<td>Two kinds of rules: constitutive rules and rules of proper performance</td>
</tr>
</tbody>
</table>

11 As an example we can give playing football on the Moon, or in the state of weightlessness.
CONCLUSION

Short ontological analysis of structure of the games that have been presented above are deeply rooted in tradition of games researching, however, they are focused on some issues that had not been taken into account before. Repartition of the two sorts of acts of playing let divide all the games precisely into two huge groups – preformative-based and kinetic-based ones. Such approach enables to notice great differences between varied groups of games. Kinetic-based games are based on the physical action in the material world (most if not all of sports are included here), while the performative-based ones are based on the range of declarations-performatives passing on some pieces of information (chess or go are included here). Unlike the performative-based games, where strategy is often a decisive factor, the kinetic-based games require also a physical participation in the material world, physical engagement in the course of the game.

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Klíčová slova: klasifikace her, pravidla her, ontologie

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