

# **The Subject and the Form: Inquiries into Formal Analysis**

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**EARLY DRAFT. PLEASE DO NOT QUOTE.**

## **Introduction**

The distinction between games-as-object and games-as-process, as discussed already by Avedon (1971, p. 419), explored by Juul (2005, p. 43-44), and explicitly established as different research objects by Aarseth (2009, p. 59), is by now almost ingrained in the field of game studies. The distinction between the empirical objects of investigation is particularly evident in game studies methodologies, some of which lend themselves to the study of players and the play activity, whereas others attempt to focus on the game as a work, through for example close readings (Bizzocchi & Tanenbaum, 2011) or formal analyses (Lankoski & Björk, 2015; Myers, 2010). These methods attempt to isolate the empirical object from the perceiving subject and contexts in which the games are experienced. Thus, they enforce the narrowing of research perspective enabled by the object/process distinction and establish what may be referred to as “the formal game object”.

The method of formal analysis is often mentioned in passing, but rarely defined. Few scholars (Lankoski & Björk, 2015; Myers, 2010) have explored the specifics of the method in the context of games. According to Lankoski and Björk (2015), “formal analysis focuses on the different elements of a work, that is, asking questions about the elements that constitute the parts of the work and the role of each element in the composition as a whole” (ibid, p. 24). This definition, which is closely related to Jakobson’s (1921) ideas in Russian Formalism, and Foucault’s (1969) discussion of works, raises some central questions for understanding the tradition of formalism in relation to the study of games: What are the traditions of formalist studies and how do these translate to games? How can games be understood as works? Is the systematic approach to the composite elements of games inherent in the formalist traditions, or does it reflect a specific research perspective? And how does this relate to other understandings of research perspectives and the empirical object in game studies?

Approaching these questions, this paper will explore various research perspectives that can be labelled formalist, in order to understand if and how these approaches have influenced game studies and the method of formal analysis. This exploration will lead to an evaluation of the subject’s role in respectively Russian Formalism, Aesthetic Formalism, and in various research perspectives on games, specifically the ones proposed by Aarseth (2009; 2014).

## **Core Concepts**

In the following, I will introduce the notion of formalism in respectively the Russian literary theory tradition and aesthetic theory, to explore their differences, particularly in relation to the object of investigation and the subject's role in this. Myers (2010) has previously explored how formal analysis and close readings, in the tradition of Russian Formalism and New Criticism is constructive for the study of digital media, due to their reliance on code (ibid, p. 46). While the relationship between executed game and source code is indeed interesting, especially in relation to the discussion of what constitutes the formal object, this discussion goes beyond the scope of the essay and has been studied elsewhere (e.g. Konzack, 2002; Willumsen, 2017).

Following, I will introduce the concept of system-centrism in opposition of the uses of formalism, to account for an object-independent analytical approach, which resembles the tradition of Structuralism. Finally, I will introduce a model for understanding the empirical object in game studies and Aarseth's (2014) division of various research perspectives on games, which will be discussed in relation to the definitions of formalism and system-centrism, and the subject's role in the various research perspectives.

## **Formalism - The Russian Tradition**

Russian Formalism refers to a particular historical entity of the 1920s, which started as a reaction against the contemporary academic trend of eclecticism in literary theory (Erlich, 1973). The motivation for this literary movement was to establish literary scholarship as its own distinct field, independent of other fields and disciplines, such as cultural history and aesthetic theory.

The focus of the Russian formalists were to understand the work of literature itself: Roman Jakobson argued, that the focus of this literary scholarship be not on "[...] literature in its totality but literariness (literaturnost'), i.e., that which makes of a given work a work of literature" (ibid, p. 628). Early formalists rejected the idea that literature refers to any underlying psychological processes, such as the reader's imaginative abilities or emotions. Russian Formalism argued in favor for the autonomous nature of poetic language; how words become objects in their own right as autonomous sources of pleasures, resembling what Doležel later discussed as texture in relation to the intensional function (Doležel, 1998, p. 139).

However, later contributions, particularly Tynyanov's redefinition of a literary work as an aesthetic system (Erlich, 1973, p. 633) brought with it implications of aesthetic evaluation. While traditional Russian formalism could be understood as a purely aesthetic approach to literature, Tynyanov's introduction of the more system-oriented understanding of the literary work marked a shift from the purely intrinsic approach towards a sociological and historically grounded understanding of literature (Swingwood & Ward, 1987, p. 15-16). This referred to an aesthetic evaluation of the object in question, undeniably relating it to contemporary cultural traditions, human psychology, and most prominently an importance of the perceiving subject, which stood in sharp contrast to Jakobson's focus on the relationship between "sign" and "referent" and the poet's attitude towards language (Erlich, 1973, p. 630). Initially detached from both author and reader, the literary work as an aesthetic system opened up for

a discussion of the subject's interpretive role, and thus its relevance in the paradigm of thought, denied in the traditional Russian Formalism, but acknowledged in many theories relating to art and Aesthetic Formalism.

## **Aesthetic Formalism**

Whereas Russian Formalism refers to a specific historical period during which a specified list of scholars worked on diverse, and to some extent idiosyncratic approaches to that, which Jakobson referred to as 'literariness', Aesthetic Formalism refers to a more general type of theory which according to Audi (1999, p. 11) emphasizes form in the study of the specific, aesthetic, artifact. Audi argues that formalism can be understood on a continuum, on which a specific theory can be ranged as more or less formalist (ibid). That is, there exists no general theory of Aesthetic Formalism, but rather it is a dynamic category for theories acknowledging and focusing on, to a greater or lesser extent, the form of the artifact.

This definition of Aesthetic Formalism implies a twofold approach to the theories which it encompasses: 1) the theory must be dealing with aesthetic artifacts, or 'works', and 2) the theory must, to some degree, emphasize form by contrasting the artifact with its relations to outside entities.

The question of what makes of an object an aesthetic artifact appears to be as difficult to answer as the question of what we can consider art. However, several classes of objects have traditionally been considered in relation to aesthetic theory, including literature, paintings, sculptures, and music, which may give us a pointer as to what qualify an object as aesthetic. One common denominator of these classes is that they all have human creators and are results of creative, human labor. Phrased differently, they are all works with authors.

*Works* is a category, which is frequently used in relation to formalism, including Russian Formalism. Yet, whereas the term 'work' is one that appears time and time again when exploring the rich body of literature on the subjects of aesthetics and literary theory, Foucault has pointed out, that there exists no actual theory of works (Foucault, 1969, p. 207), and hence that we cannot define exactly what is meant by the term. While it may be used in relation to an author, the work constituting the production of a specified person, Foucault notes that this understanding too is naive, particularly in studies, which attempt to distance themselves from the notion of authorial intent.

It appears that we are facing difficulties already in the first defining characteristic of aesthetic formalist theories as the notion of 'works' seem impossible to directly define. Although Foucault has a valid point in the difficulties of relating a work to an author, this problem arises under special circumstances, and it may therefore be productive to conceive of a work as produce of an author, acknowledging that this author may not be a single individual, but rather a heuristic device. Thus, the heuristic author concept can be used for narrowing down what may be considered a work, and thus the object or artifact for which the Aesthetic Formalist theory is appropriate.

The second defining characteristic of Aesthetic Formalism refers to the priority of studying form as opposed to outside entities, for example the author, the perceiving subject, or the

historical context. According to Audi (1999, p. 11), form simply refers to the nature of the work, as independent of the outside entities. However, what is considered form may depend on the work under investigation. Theories of music tend to be more formalist than theories of literature and drama, and visual arts are located somewhere in between (ibid). This seems to be a result of apparent structures of the works; it seems as if music has a more apparent structured form than for example a narrative. Yet, in this assertion, structure and form are confused. Form does not imply more or less strict component structures. I will therefore argue that it is necessary to distinguish between (aesthetic) formalism and system-centrism, the latter of which I shall introduce and define below.

## **System-Centrism**

System-centrism relates to the tradition of structuralism. According to the Cambridge Dictionary (2017), structuralism can be defined as “a system of ideas, used in the study of language, literature, art, anthropology, and sociology, that emphasizes the importance of the basic structures and relationships of that particular subject” (ibid). Since structuralism is often understood as a historical paradigm of thought, introduced with Saussure’s structural linguistics, some may consider it problematic to transfer the term to other areas of research, let alone use the term for contemporary studies of objects outside the category of language and literature. Therefore, I will instead use the concept of system-centrism to account for the emphasis on the basic structures of an object (or subject) under investigation.

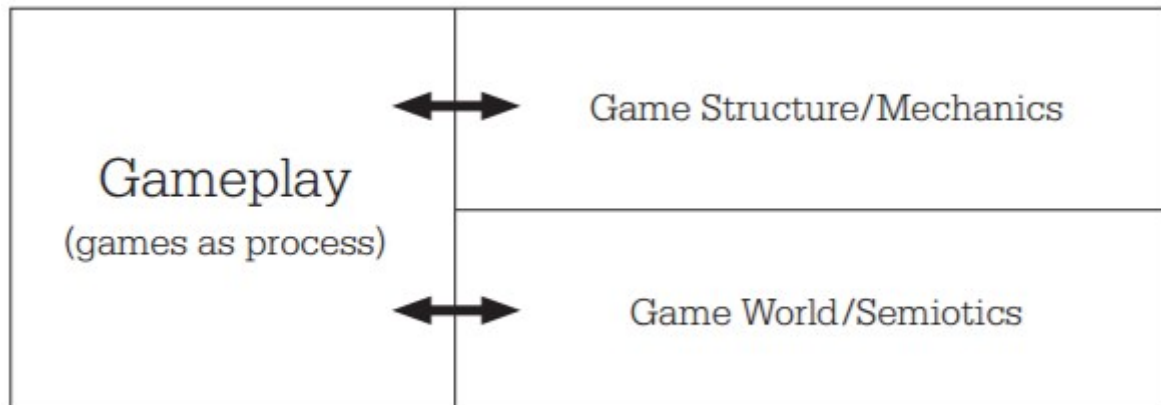
Contrary to both Russian and Aesthetic Formalism, which both focus on analysis of an artifact as a work, system-centrism does not favor form as particular for a category of aesthetic objects, but rather the structural components of a given object as a system containing various elements. Thus, system does not refer to any technological computer system, but to a composite structure, which needs not constitute a specific form. This also means that system does not refer to the system as an underlying structure of the object in question, but rather to a specific perspective or scientific approach.

Aesthetic Formalism and system-centrism are easy to confuse, as formalist studies of works often emphasize the structures of the work in question. However, Aesthetic Formalism does not, per definition, deal systematically with the work or its category (or medium, e.g. literature, painting, sculpture, etc.), and it is only in combination with a system-centric approach that the formalism study of a work gains what can appear to be a structuralist nature. That means that it is possible to have a theory, which categorizes as formalist according to Audi’s (1999) criteria, without it being focused on the structural components of the work in question. At the same time, it is possible to perform a system-centric analysis of an object, without considering it as a work or as an aesthetic artifact, and without isolating the object from outside entities. Therefore, system-centrism does not favor a particular perspective on the perceiving subject: It is equally possible to imagine a system independently of a subject and integrated with the subject.

## **Game-as-Object and Game-as-Process**

Before it is possible to discuss the various understandings of form, formalism, and structure in a game context, I will introduce Aarseth’s categorization of the empirical object of game studies. According to this categorization, we can understand games in two different ways; as

objects and as processes. Aarseth (2009) suggests a division of the empirical object into three different main components, creating two main research objects, as illustrated below:



Aarseth's division of the empirical object in game studies (Aarseth, 2009, p. 59).

Aarseth argues, that the game-as-object can be meaningfully split into two: a) the game structure, which refers to the mechanics of the game – game mechanics is a contested and often criticized term (see for instance Sicart (2008)), which, in Aarseth's study, relates to the machinic elements of the game. And b) the game world, used to account for what Aarseth explains as the external, semiotic expression of the game – the representation on the screen. Combined, the mechanics and semiotics of the game constitute the game object, which Aarseth states can be studied independently of the activity of playing. Gameplay, on the other hand, refers to the study of player engagement with the game object, and therefore studies of the game-as-process tend to be focused on the activity of playing rather than the very game itself.

The two distinct empirical objects call for different research methods: the game-as-process must be understood as an activity in relation to its socio-cultural context. It is often explored in qualitative studies where the scholar observes player behavior, either during play, in so-called play sessions, or through other means, as for instance interviews or netnography in online game forums. The game-as-object, on the other hand, does not call for any particular understanding of the player as a specific, historical player. Instead, the scholar must distance herself to the object under investigation and approach it in similar ways as in literary theory or film studies. This relates the game-as-object to the previously introduced ideas of formalism, where the aesthetic artifact or work is studied in relation to its form, rather than in relation to outside entities.

It appears as if formalist game studies, and specifically the formal analysis, explores the game-as-object. However, the subject, in the context of games (the player) has various implications in the different theories introduced so far. In order to compare and explore the theories in relation to each other and the traditions of game studies, it is first necessary to assess the role of the subject in these theories.

### **The Role of the Subject**

Because of the varying degree to which the subject is integrated in the various types of formalist thinking, it seems unproductive to conceive of the subject's role as binary. Instead, I will suggest, much in line with Audi's (1999) reflection on Aesthetic Formalism, that we

think of the subject's relevance on a dynamic continuum. As explored in the review of Russian Formalism, different theorists and their specific theories may consider the subject as more or less relevant in their study of the object in question, and sometimes the subject may be given implicit importance in for example reference to semiotics or hermeneutic interpretation.

Common to Jakobson's "radical" formalism, Tynyanov's redefinition of the literary work, and theories that, according to Audi's qualifying characteristics of Aesthetic Formalism, is the notion that the subject is never completely isolated from the study. Jakobson's formalism emphasizes the texture of the work in question, which gives the literary work its aesthetically effective meaning (Doležel, 1998, p. 138). In order to perceive this meaning, the reader must sustain a certain aesthetic attitude (Audi, 1999, p. 11), appropriate for approaching the specific work. Therefore, while the basic idea of Russian Formalism is to eliminate outside entities from the study of the literary work, the subject is not just implied, but actually central to the study, as long as the object of study is considered an aesthetic work. However, the subject in this equation is not a particular, historical reader, but rather an implied reader, a term coined by Wolfgang Iser (1974) to account for a theoretical construct, which allows the literary work to exercise its effect.

It is, however, evident that the subject's role is more clearly articulated in the ideas of Tynyanov. With the introduction of the term aesthetic system, the subject gains a new meaning as not just implied in the construction of the literary work, but as an active perceiver exercising an aesthetic attitude. In many takes on Aesthetic Formalism, the relevance of the subject increases. Consider the many discussions of art, and how a definition of art is often argued to lie in the eyes of the perceiving subject. Similarly, the development of semiotic theory illustrates a change in the perceiving subject's role; from the traditional theory of semiology by Ferdinand Saussure to Roland Barthe's modern take on the subject matter, which brought semiotics closer to Marxist theory, arguing for an organization of the symbolic dimensions of artifacts, which expresses specific cultural values (Huppatz, 2011, p. 88).

### **Relations between Concepts and Games**

The subject's role is one way of organizing the theories in relation to each other, and it is particularly useful for pointing out how neither of Russian Formalism, Aesthetic Formalism, nor System-Centrism are actually particular theories, but rather specific research perspectives or categories of theories.

The subject's role seems an appealing way of exploring the uses and applications of formalist thinking in the context of games. When considered in the light of the game-as-object and game-as-process division, it seems as if there is a clear link between the formalist school of thought and the idea that a game can be studied as an object, independent of outside entities.

However, games are special types of objects, which depend on a human player in order to exist (Kücklich, 2002). Inspired by Iser's (1974) implied reader, Aarseth (2007) suggests a revision of the term for the study of digital games. He suggests that we understand games in relation to an implied player, defined as "a role made for the player by the game, a set of expectations that the player must fulfill for the game to "exercise its effect"" (ibid, p. 132).

Accepting the player's role in the study of games resembles the partial inclusion of the reader in Russian Formalism, particularly the shift that followed Tynyanov's work. From a system-centric approach, the game-as-object does not only relate to a human perceiver, which can be excluded from the study and understood as implied – the game needs a human player to interact with the game structure, through interpretation of the game world. The actions of the player will partially determine the sequence through which the game world presents itself, according to when and where certain actions are performed, and thus the player influences parts of the texture of the game. Therefore, if we were to conduct a study of digital games which follows a Russian Formalist line of thought, the player will assume a quite central role, as there are no "objects in their own right" in games, as their existence in the particular instance of the game depends on how the player decides to perform her actions. This means, that a study of games, which emphasizes a Russian Formalist perspective, will not approach the game as either object or process, but rather as both, because the very texture of the object is generated through a procedure, which depends on human input.

Aesthetic Formalism thus seems to be the only type of formal category left for understanding how games may be explored from a formalist perspective as objects rather than processes. As previously argued, however, formalism is not one specific category, but rather a group of categories, that have certain qualifying criteria. The specifically interesting aspect of the Aesthetic Formalism is its focus on works, and how this can be translated to the study of games.

Let us briefly return to Lankoski and Björk's definition of formal analysis, to be reminded of how games in this perspective are considered works: "[F]ormal analysis focuses on the different elements of a work, that is, asking questions about the elements that constitute the parts of the work and the role of each element in the composition as a whole" (Lankoski & Björk, 2015, p. 24). This definition seems to not only emphasize an Aesthetic Formalist perspective, with the focus on games as works. It also uses a system-centric approach for dividing the empirical object into elements that can be studied as parts of the whole.

It is impossible to discuss games as works without relating this discussion to games as art, as the term 'work' is most often related to 'works of art', 'artworks', or 'aesthetic works'. The discussion of whether games can be considered art deserves more attention than merely a short paragraph (Sharp (2015) has dedicated a whole book to this discussion). This discussion is only complicated further by the controversial nature of aesthetic judgement and definitions of 'art'. For now, it must suffice to say that digital games are constructed artifacts that always have one or multiple authors. The role and the intention of the author(s), and what part this should play in the analysis, is an additional discussion, which deserves its own paper (explored by e.g. Wimsatt & Beardsley (1946)). Digital games are products of creative, human labor, which most often contain audiovisual and textual information that can be attributed to their human creators, perceived by a subject, and thus be the object of aesthetic evaluation and judgement.

An Aesthetic Formalist theory or method can be system-centric and focus on the component parts of the game. This means, that the theory will explore the game form as well as the game structure, as called for in Lankoski and Björk's take on formal game analysis. Such a theory or method must accept the human player as a variable influencing both form and structure, based on how he or she actualizes the game through play. However, a system-centric Aesthetic Formalist theory seems to function well in combination with Aarseth's idea of the implied player, where the specific historical player or the single instance and actualization

does not matter. The player is central for exploring transgressive moments and the boundaries of the game, but a theory accounting for form and structure needs not consider the individual play-through, as the focus of such a theory is not necessarily on texture or sequence of game structure and game world. Such a theory may attempt to explore what we can even understand by game form, and doing so from a system-centric approach would most likely result in an ontology, many of which have been suggested for the study of games.

### **Approaching ‘Game-ness’**

Ontology in this context does not refer to the philosophical understanding of the word, relating to the nature of existence, but rather to a computer science use of the term (Aarseth, 2009, p. 55), often defined as a formal naming and definition of entities and their relationships, which exist for a specific domain of discourse (Guarino, 1998, p. 7). This makes game ontologies closely resemble taxonomies, where the hierarchy of entities, the relations between these entities, and their conventions for naming are central. An example of this type of ontology is that of The Game Ontology Project, developed by Zagal et al (2007) in which they state their goal as “[...]to develop a game ontology that identifies the important structural elements of games and the relationships between them, organizing them hierarchically” (Zagal et al, 2007, p. 22).

As revealed by this description, ontological approaches to game studies are occupied with exploring and defining the structural elements of games, making them system-centric by method and perspective, and formalist in the attempt of understanding “game-ness” and thus what constitutes game form. This appears to be the common interest of ontologies within game studies: structurally approaching games in order to understand what makes them special, what makes them stand out from other types of aesthetic works, and what grants them the form which qualifies them in the category of games.

Understanding the formalist approach to the study of games through Aesthetic Formalism, we now see that formalism and Lankoski and Björk’s (2015) take on formal analysis are ways of studying digital games, with a system-centric approach, from an Aesthetic Formalist perspective. This perspective identifies the game as a work, which has its own particular elements and qualities by its being a game – its game-ness. This type of study relies on a conception of the structural elements of games, and will inevitably refer to an ontology or analysis model that favors certain aspects of games. Thus, the scholar conducting formalist game studies, or using the method of formal analysis, must be aware of how and which ontology is used, the potential limitations of its elements, and how it relates to the game-as-object and game-as-process respectively.

### **Criticism of Current Approaches**

This paper has already illustrated how Aarseth’s (2009) distinction of game-as-object and game-as-process can be put into question when studying games from a formalist perspective. Having introduced the concept of system-centrism, it seems relevant to question the current acknowledged research perspectives, as suggested by Aarseth (2014), as these appear to be built on the assumption that the empirical object can be separated into the categories of game structure, game world, and game play.



Aarseth's division of the empirical object is in the illustration of various research perspectives been renamed from his original 2009 categories (see below): the game world is now Artwork, the game structure is now System, and the game play is translated to Player Activity. Each of these foci can be explored from normative/prescriptive or descriptive perspectives, resulting in what Aarseth explains as six different research perspectives on games.

<b>Empirical Focus:</b>	<b>Artwork</b>	<b>System</b>	<b>Player Activity</b>
<b>Normative/ Prescriptive:</b>	Critical (ideology)	Exploratory (game design)	Utilitarian (serious games)
<b>Descriptive:</b>	Aesthetic (art history)	Ontological	Clinical (player experience)

Aarseth's six research perspectives on games (Aarseth, 2014, p. 486).

While the research perspectives suggested above appear to be represented in existing literature on digital games and gaming, it implies that aesthetic and player-centric foci naturally disregard a system-centric approach to games. Yet, as previously discussed, the formalistic approach to games emphasizes the game as a work, which can be the object of aesthetic judgement, transcending the borders between an aesthetic and ontological research perspective. Similarly, the empirical focus of System appears problematic when a system-centric approach can be applied in a variety of studies, including for example player activities<sup>1</sup>.

Ultimately, Aarseth's division of the empirical object (Aarseth, 2009) as well as his division of the various research perspectives on games (Aarseth, 2014) are put into question. They may be useful primarily for marking out clear boundaries between those who study games based on textual analysis, those who explore the cultural and societal context of play and games, and those who conduct qualitative studies of players. It is tempting to blame the institutionalization of game studies, as the scholars of the field are most commonly located within university structures that favor a specific perspective (for example game scholars hired in media studies departments, literature departments, sociology departments, or computer science departments).

However, what may have previously been a multidisciplinary research field is expanding and slowly developing into its own established field, where ontologies are used as tools for understanding and outlining what elements of games appear important and significant to study. It is therefore relevant to consider how the formal analysis cannot fit into a single box in Aarseth's model on research perspectives. It is important that game studies keep its

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<sup>1</sup> It is, however, important to note that *System* may in Aarseth's terminology refer to a computer system, rather than a system-centric or structuralist approach, but the inclusion of ontology in the research perspective of descriptive system-focus makes it appear as if it is the system-centrism which is emphasized, rather than the computer system or game mechanics.

multidisciplinary nature, but that we accept that various research foci are not always as demarcated as it would otherwise appear.

Game scholars must reflect upon the paradigms of thought, which their research relates to, what this means for their area of study, and how they approach the empirical object of their research. Assuming that a formalist study of the game-as-object negates all understandings of the subject's role is naive, as the acceptance of games-as-works also implies a relevance of the player.

## Conclusion

This paper has explored the various traditions of formalist studies, in Russian Formalism and Aesthetic Formalism, with the intention of better understanding the research perspectives in formalist game studies and the subject's role in these.

With the introduction of the concept of system-centrism, it becomes apparent that there is a difference between focusing on the form of an aesthetic object, and doing so from a system-centric approach. Structure is not inherent in the formalist thinking of aesthetic artifacts; rather it should be understood as a certain research perspective, which may be emphasized in various degrees in different research methods. Additionally, the study has revealed how the different "formalisms" operate on different hierarchical levels and how the distinction between theory, approach, research perspective, and method is not obvious, yet crucial. Their different nature as theory/research perspective/method/etc. inevitably influence their applicability and overall role in the formal analysis in a games context.

The exploration of formalism revealed that the subject's role is more diverse in such theories than otherwise assumed. Once explored in the context of games, this breaks with Aarseth's (2009) division of the empirical object in games research as well as his suggested research perspectives (Aarseth, 2014). This leads to the conclusion that the formalist study of games may not be as demarcated from player studies as otherwise assumed, and that the clear distinction of game-as-object and game-as-process is somewhat problematic.

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