

Lotman and play: For a theory of playfulness based on semiotics of culture

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Abstract. The aim of the article is to introduce an approach to play based on semiotics of culture and, in particular, grounded in the works and ideas of Juri Lotman. On the one hand, it provides an overview of Lotman's works dedicated to play and games, starting from his article on art among other modelling systems, in which the phenomenon of play is treated deeply, and mentioning Lotman's articles dedicated to various forms of play forms, such as involving dolls and playing cards. On the other hand, it applies a few Lotmanian theories and ideas to playfulness in order to shed some light on this highly debated, as well as intriguing, anthropic activity. Thus, the paper approaches some of the core questions for a play theory, such as the definition of play, the cultural role of toys and playthings, the importance of unpredictability, the position held by playfulness in the semiosphere and, finally, the differences and commonalities between play and art. Lotman's theories and works, often integrated by other existing semiotic or ludologic perspectives offer an extremely insightful and fresh take on play and illustrate the great heuristic potential of semiotics of culture.

Keywords: Lotman; play; toys; unpredictability; culture; art

1. Introduction

In the last couple of decades scholars from many different disciplines have made joint efforts in order to define an academic approach to digital games. The result has been the foundation of *game studies*, a variegated new branch of humanities dedicated to

the study of games.¹ Semiotics shares a close relationship with this new discipline: a few game scholars are, or have been, semioticians, while many game theories owe a lot to semiotics. Despite some early criticism and misunderstandings,² different branches of semiotics have been successfully applied to game studies and new tools of analysis have been developed. The Peircean approach is probably the most common one among game scholars, although also Greimas' and Eco's theories are widely quoted. On the other hand, however, game studies appear to ignore or underestimate the works of Juri Lotman.³

Lotman's *oeuvre* is indeed huge and heterogeneous, and it contains relatively few works on play. A general lack of accessible translations and an occasional misleading title partially explain the general lack of interest in Lotman's works in the field. Nevertheless, Lotman's Semiotics of Culture has a lot to offer to game studies.

On the one hand, the works that Lotman dedicated to play⁴ offer a new, original, point of view on the topic. Although Lotman never explicitly developed a general theory on games, he treated many different aspects of play: the essence of playfulness, the modelling influence of play on culture, dolls as metaphors and works of art and, finally, playing cards in Russian culture and literature in the 19th century.

On the other hand, many concepts and intuitions deriving from Lotman's semiotic theories can be fruitfully integrated into other approaches to games and, sometimes, even shed some light on topics that otherwise are extremely difficult to approach.

The twofold aim of this article is, thus, to approach systematically Lotman's works on play, as well as to exploit some of his analytical tools and apply them to games and play. The argumentation will be articulated in five sections, each one of them dedicated to one of the most problematic, groundbreaking or unresolved topics in games studies: (1) the definition of play; (2) the cultural relevance of toys; (3) the question of unpredictability; (4) the position held by playfulness in culture; and (5) the relationship between play and art. Each of these sections exposes Lotman's views on the topic and integrates them with existing semiotic or ludologic theories in order to propose a heuristic approach featuring simultaneously in-depth analysis and epistemological coherence.

¹ For an introduction to game studies see Mäyrä 2008.

² See e.g. Aarseth (1997) who claims that semiotics cannot be considered a privileged perspective in the approach of digital games.

³ Among the few game scholars consistently employing Lotmanian theories we should mention Angelina Ilieva (see Ilieva 2013).

⁴ In this article we will focus on Lotman's works on the more "ludic" forms of play, ignoring, for now, theatrical and musical "play". An analysis of all aspects of play in Lotman would be very interesting but, at this stage, it would also constitute an unnecessary complication.

2. Defining play

Finding a satisfying and unambiguous definition of play or games has always been one of the hardest challenges for anyone approaching the subject. In his *Philosophical Investigations* (1953) Wittgenstein claims that finding such a definition is simply impossible: the similarities between different games overlap and criss-cross, but fail to be omnicomprehensive. Therefore, he states, when we speak about play, we actually refer to a series of phenomena merely characterized by a “family resemblance” (Wittgenstein 1953: 1.67).⁵

Despite Wittgenstein’s pessimism regarding the possibility of defining play, many scholars and game designers have attempted this task. One of the most fortunate definitions is probably the one formulated by Johan Huizinga (1949) who detects a series of characteristics common to all forms of play, including separation from ordinary life, the distance from material interest, and immersivity. According to Huizinga, playfulness is a basic feature of human life that precedes culture and permeates many cultural manifestations, such as rituals, magic, art and even war (Huizinga 1949: 7, 24–25).

Some years later, Roger Caillois (1967) elaborated Huizinga’s definition and delineated six characteristics of play, which, according to him, are always present: being fun, separated, uncertain, non-productive, governed by rules and fictitious. Caillois’s definition – as well as his famous typology (see Section 3.3) – is still among the most successful ones in game studies. Dozens of others, however, exist, either focusing on the common characteristics of different play forms or the inner workings of playfulness.⁶

An approach that is particularly interesting for our topic is that of Gadamer’s (2000). His theories on play (*Spiel*) have been very influential on Lotman’s own ideas of playfulness (see Botz-Bornstein 1996). In his work on ontology, Gadamer uses play as a starting point and as the thread of his line of reasoning. He describes players as aware that the frame in which they act is not serious, but, at the same time, being extremely serious themselves. However, according to Gadamer, the players must not be considered the subject of play, but rather a channel by means of which the play itself takes form. Hence, it is the ontology of play and not of the players that concerns him. From this point of view, Gadamer explicitly agrees with Huizinga, who states that play precedes consciousness and thus that it is possible to play without being aware of doing so (Gadamer 2000: 229).

⁵ Some scholars, such as Bernard Suits (1978), attacked the position, claiming that it is possible, in fact, to define ‘games’. Their criticisms, however, are grounded on a mistranslation of the German term *Spiel* which indicates at the same time ‘play’ and ‘game’. In his original claim, Wittgenstein is clearly using the term in the former meaning – as it results evident from the examples that he uses.

⁶ For an anthology of the different definitions of games see Juul 2003.

Analysing the metaphorical use of the term *Spiel* – which, for him, reveals the true nature of play – Gadamer defines the latter as a movement of “come and go”, independent from – but symmetrical to – the player’s movement (Gadamer 2000: 231–235). Play allows a certain degree of freedom of choice, which is always endangered and limited by the game itself, which, in turn, entirely dominates the player and transcends him (Gadamer 2000: 237, 243).

According to Gadamer (2000: 241), however, the fundamental nature of play is that it is always consistent with *self-representation*: the proof being that we always play *at* something (Gadamer 2000: 241). Play, therefore, assumes its perfect form when it addresses someone and, by doing so, becomes *art* (Gadamer 2000: 245). Transfigured into art, play finds its true, authentic self: according to Gadamer (2000: 245, 257) play is, as a matter of fact, pure *form*.

As we shall see, Lotman was indeed partially influenced by Gadamer’s ideas on play, even if we should point out that he disagrees firmly with many of the philosopher’s claims, especially those on the relationship between play and art, a very important and delicate concept in Lotman’s theory.

2.1. The place of play among other modelling systems.

First published in *Sign Systems Studies* in 1967 under the title “Искусство в ряду моделирующих систем”, the article “The place of art among other modelling systems” is one of the most important texts of Lotman’s first period. At this stage, the Tartu semiotician mostly focused on texts and modelling systems: the objective of the article was to show the unity and importance of artistic texts. Nevertheless, probably influenced by his reading of Huizinga’s⁷ and Gadamer’s works, Lotman also introduces a restricted theory of playfulness. Even if the semiotician appears to agree with his predecessors in underlining the major importance of play in the developing of animals and human beings, still, play for him is not such an all-comprehensive phenomenon as described by those authors. According to Huizinga (1949: 158), art (or at least a certain kind of art) is, in fact, a playful phenomenon. What is more, for Gadamer, art is play’s perfected inner nature. Lotman, on the other hand, accepts a certain degree of similarity between the two, but strongly defends the independence of art which is, according to him, above play (Lotman 2011[1967]: 265).

What matters to us, however, is not the supremacy of either art or play, but the original definition of play that Lotman provides in his paper. Differently from Huizinga and Caillois, Lotman does not try to define play with the help of a list of

⁷ At the Lotmanian conference “Text as a dynamic object” held in Kraków in 2014, Mihhail Lotman told the audience that Juri Lotman had read Huizinga’s book, but had not liked it because it appeared to him as an excessive simplification of the problem.

characteristics common to all its forms, but he rather circumscribes the primary essence of playfulness. First of all, Lotman identifies the role of play in culture as a way of learning. Thanks to play:

First, the learning individual gets the possibility to freeze the situation in time (change his move, “move again”). Second, he learns to model the situation in his consciousness, as he will envisage a certain amorphous system of reality as a game, the rules of which can and must be formulated. Related to this is another important feature: play gives a person the chance of a conditional victory over an unconquerable (for instance, death) or a very strong (the game of hunting in a primitive society) opponent. (Lotman 2011[1967]: 253)

Play thus is a fundamental phenomenon for humans and animals as it creates a “sandbox” in which it is possible to perform safely the activity of modelling reality that can be stopped and repeated at any time. Thus, playing involves creating of a model of reality, which translates some of the characteristics of the real world into a system of rules.

To be able to perform such a useful activity, a specific behaviour is necessary. Lotman’s description of playful behaviour has some affinities with Gadamer’s idea of play as a serious activity in a non-serious frame (see Section 2). In particular, Lotman states that:

Play is the realization of a certain kind of – “playful” – behaviour, which is different from both practical behaviour and behaviour based on models of the cognitive type. Play is the simultaneous realization (not their alternation in time!) of practical and conventional behaviour. The player must simultaneously remember that he is participating in a conventional (not real) situation (a child knows that the tiger in front of him is a toy and is not afraid of it), and not remember it (when playing, the child considers the toy tiger to be a real one). (Lotman 2011[1967]: 254)

The player, then, oscillates between two different worlds, those of the real world and the world of play, acting *almost* as if the latter was real. According to Lotman, this is the underlying structure of every form of play, the very basis of playfulness. Lacking the ability of mastering this twofold behaviour means lacking the ability to play. On the one hand, taking conventional behaviour too seriously can be very dangerous and lead to severe consequences in the real world, while, on the other hand, being incapable of taking conventional behaviour seriously makes it impossible to play at all – everything that is not real would seem silly, illogical and, therefore, meaningless.

These two parallel world-views are both simultaneously significant and propose to the player two different sets of meaning, conventional and practical, fictional and real, which coexist in a peculiar way in the receiver:

The mechanism of play involves not the static simultaneous coexistence of different meanings, but the constant awareness of the possibility of alternate meanings to the one that is currently being perceived. The play effect means that different meanings of the same element do not appear in static coexistence but “twinkle”. Each interpretation makes up a separate synchronic slice, yet retains a memory of earlier meanings and the awareness of the possibility of future ones. (Lotman 2011[1967]: 264)

In addition to this duplicity, one of the main features of play, states Lotman, is its ability to model randomness:

Play models randomness, incomplete determination, the probability of processes and phenomena. This is why a logical-cognitive model is more suited for recreating the language of a perceived phenomenon, its inner nature, while a play-type model is more suited for recreating its speech, which is incarnated in a material that is arbitrary in relation to language. (Lotman 2011[1967]: 256)

Play models randomness but it is also a regular, even deterministic phenomenon:

Play is a special kind of representation of a combination of regular and random processes. Thanks to the pronounced repeatability (regularity) of situations (rules of the game), any deviation becomes especially significant. At the same time, the base rules do not permit to predict all the “moves”, which appear as random in relation to the basic repetitions. This means that each element (move) has a double meaning, serving as a confirmation of a rule on one level and a deviation from it on another. (Lotman 2011[1967]: 256)

Whereas in relation to the logical-cognitive systems corresponding to it, play is a model with a greater degree of randomness, it can be characterized as a more deterministic system in relation to the activity it models. (Lotman 2011[1967]: 258)

This is a quite important point: play, being a model, is simpler than reality, and therefore it is more deterministic. In addition, clear rules and repeatability make play easier to master than reality. On the other hand, randomness is one of the main features of play, and it is introduced in many ways: through the use of apposite devices (dies, cards etc.) or by giving a greater degree of freedom to the players, who will act in an unpredictable way.⁸ Play, then, appears to have a congenital duplicity: conventional and practical, deterministic and random, always simultaneously twinkling in the consciousness of the player.

⁸ The players’ multiple choices are a fundamental element of playfulness, for Lotman: “[T]he moment when the player has no more choices, the game has lost its meaning” (Lotman 2011[1967]: 159).

Lotman dedicates a few pages to underlining the importance of the relationship between art and play. Even if play and art are close, Lotman is categorical in saying that they are not the same thing, even if “elements of play exist (in a different manner) both in the behaviour of the creator and the audience (analogous to technical mastery)” (Lotman 2011[1967]: 256).

Art shares a similar duplicity of behaviour with play, but it oscillates between the practical and the factitious instead: the artist experiences all the emotions of a real situation, aware that there is no need to perform the actions related to that situation. This duplicity aims at “getting a grasp of the world” (Lotman 2011[1967]: 264), by exchanging the overcomplicated rules of reality with a simpler system of rules that, if followed, allows the artist to solve, fictionally, a real-life situation. Nevertheless according to Lotman, art and play have very different efficacies:

Play means mastering certain skills, training in a conditional situation; art means mastering the world (modelling the world) in a conditional situation. Play is “just like an activity”, art is “just like life”. (Lotman 2011[1967]: 256)

Finally, similarly to Gadamer who stated that play is mainly “form”, Lotman claims that it is “without content” (Lotman 2011[1967]: 269).

Play, thus, is not what Lotman is looking for, it “cannot be a means of storing information and developing new meanings” because “the goal of play is following the rules” (Lotman 2011[1967]: 265). Lotman, in those years, was looking for a way to integrate cybernetics and linguistics, and believed that art could become a perfect way for machines to store and create meaning. He also considered that it would have been suitable to create a new science to undertake this task, “artronics” (Semenenko 2012: 130; Lotman 2011[1967]: 268).

This claim – that play is unable to create new meaning and devoted only to developing skills to be used in real life – could seem completely wrong if confronted with the strongly narrative, emotional and involving digital games that are so common nowadays. This contradiction, however, is only apparent, as we will see in the last section of this article.

What matters here is that Lotman proposes an original and defiant description of the most basic level of playfulness, of the core working of play. In the next section an attempt is made to show how this semiotic definition of playfulness can be fruitfully combined with game studies.

2.2. Half-real games and the lusory attitude

The idea of games being in between reality and fiction is not completely new to game studies. Jasper Juul’s *Half-Real: Digital Games between Real Rules and Fictional Worlds*

(2005) is in its entirety dedicated to the description of games as objects that partially pertain to the real world and partially to fiction. Juul's goal was to create a bridge between the two sides of a controversy that divided game scholars into "ludologists" and "narratologists" according to their ideas on the importance and role of narration in digital games. This controversy is now long overcome,⁹ but Juul's work is still considered a milestone in the field of game studies.

In brief, Juul claims that digital games feature at the same time components related to the real world – rules, supports etc., and components related to fictional worlds – fictional characters, objects and events. When approaching a digital game, according to Juul, we are approaching a hybrid artefact with a twofold ontology.

Lotman's definition, however, goes a little further and takes two different directions. First, Lotman states that this innate duplicity is not only limited to games, but it applies to all forms of play. Secondly, according to him, this duplicity is what defines playfulness. In other words, being a simultaneous realization of a practical and conventional behaviour is not a somehow problematic characteristic of games, but rather consists in a core definition of 'playful behaviour' itself. Lotman's definition, therefore, can be a very rewarding addition to game studies.

Furthermore, it could be fruitful to relate Lotman's idea of 'playful behaviour' with the concept of 'lusory attitude'. The lusory attitude (Suits 1978) is a special mindset that allows to enter, from the real world, the "magic circle" – a term formulated in Huizinga 2002 which indicates the separated and circumscribed space of play and has been described by different scholars as a province of meaning (Berger, Luckmann 1966), a psychological bubble (Apter 1991; Stenros 2014) or a semiotic domain (Gee 2003; Nieuwdorp 2005)¹⁰. The lusory attitude, according to Apter 1991 and Nieuwdorp 2005 is articulated in two parts: the *paratelic* and the *paraludic* attitudes¹¹. The paratelic attitude occurs with the mere willingness to enter in the semiotic domain of play. The players are not playing any game yet, but they have a playful attitude and activate their own competence in that domain. The paraludic attitude is the second step: the players actually accept a precise set of rules – more or less complex – and start playing.

We can reformulate these concepts according to Lotman's theory: the paratelic attitude involves the acceptance of a behaviour that occurs on two different planes

⁹ See, for example, Janet Murray's preamble to 2005 DIGRA conference, entitled "The last word on ludology v narratology in Game Studies".

¹⁰ Nieuwdorp, Eva 2005. The pervasive interface: Tracing the magic circle. *Proceedings of DiGRA 2005 – Changing Views – Worlds in Play* is available at <http://www.digra.org/wp-content/uploads/digital-library/06278.53356.pdf>.

¹¹ Probably due to convergent evolution, a very similar distinction is also made in Gadamer 2000: 239 in which the author underlines the fact that, in order to play a game, a player has to go through two phases: first, one has to choose to play, and then choose which game one wants to play.

(the practical and the conventional), while the paraludic attitude consists in accepting a specific practical behaviour (i.e. a specific set of rules) and a specific conventional behaviour (i.e. the fictional setting of the game).

As we can see, Lotman's definition of play can be a useful heuristic tool in order to conjugate many different theories otherwise problematic to keep together. If, on the one hand, Lotman's definition of play need not suffice to take into account all the aspects of such a complex phenomenon as playfulness, on the other hand, it constitutes a possible theoretical platform which is both solid (thanks to its belonging to a broader semiotic theory) and able to re-interpret and exploit the wide range of theories and tools developed by game studies.

3. Toys and semiotics

Despite their cultural relevance, toys are generally neglected in academia. Only relatively few academic works focus on toys and these mainly deal with the psycho-therapeutic functions of toy-play, or with their history. Even the fundamental works in game studies, such as Caillois 1967 and Huizinga 2002 fail to focus properly on toys (or, in the latter case, even to mention them). Among the few important works on toys we should mention Erikson's (1981[1977]) and Winnicott's (2005[1971]) books about toys and psychoanalysis and Fink's *Oasis of Happiness* (1969[1957]), in which the German philosopher mentions toys briefly.

Semiotics of culture offers what appears a valid starting point for the creation of a semiotic theory of toys: Lotman (1980[1978]) focuses on certain features of toys in his paper on dolls, but it might be his concept of *autocommunication*, as we shall see, that offers the most insightful interpretation of the role that toys play in culture.

3.1. Dolls (and toys) in the system of culture

Lotman's "Dolls in the system of culture" could be considered by some as a "minor" paper. First published in 1978 under the title "*Куклы в системе культуры*", it has never been translated into English.¹² Nevertheless, it is a very interesting article and sheds some light on Lotman's views on play and toys. Before any other consideration, it is important to mention that the Russian word 'кукла' can be translated both as 'doll' and 'puppet'. The objects of Lotman's semiotic analysis are both the toy and the artefact used in stage art (i.e. puppet theatre). This dichotomy is important because it brings closer to each other two objects that, due to terminology, we generally consider different, even though they share some common traits.

¹² In this paper I used the Italian translation available in Lotman 1980. All the quotations in this text are my translations from Italian, M. T.

According to Lotman, dolls have three different dimensions that can be analysed: first of all, dolls are toys, objects to play with upon which it is also possible to project fantasies; secondly, dolls are models and play a metaphorical role in modelling various cultural phenomena; finally, dolls are works of art, as they are exploited in theatre and imitated in animated cartoons (Lotman 1980: 150). This article will not treat all three characteristics of dolls, but will rather focus on their most relevant features in relation with play.

According to Lotman, a definition of dolls must take into consideration the difference between *statues* and *toys*. He locates their main difference in the kind of audience they are oriented to. There are two different kinds of audiences: an “adult” audience, which is silent, does not touch anything and merely receives the message from the text, and a “childish” or “folkloric” audience which wants to play with the text, to touch it, to intervene in the spectacle and to speak with the actors. If the former audience mainly receives information, the latter partially co-creates it. Statues, therefore, are intended for an adult audience: the meaning is stored in the statue by the artist and the audience plays the role of the receiver. Dolls, on the other hand, are directed at a childish/folkloric audience that carries out most of the semiotic activity by appointing new meaning onto the text. This kind of audience works both as the author and the receiver of the text and the original creator of the doll is, ultimately, almost marginal (Lotman 1980: 146).

The difference between the functions of statues and dolls is also based on the amount of details that these objects might have. A statue generally needs a lot of details in order to convey the message that the artist wants it to communicate. On the contrary, dolls have generally very few details, because they function like a canvas upon which the players will project their own imagination. It is imagination that makes a doll unique in the eyes of players, that makes her cry, laugh, eat or walk. Dolls, thus, require a certain degree of indeterminacy (Lotman 1980[1978]: 147).

Lotman’s ideas on toys expressed in this article might be a very valuable starting points for a semiotic analysis of toys, that unfortunately is still non-existent today. We will here try to develop briefly some of his concepts in order to show their heuristic potential.

Lotman, speaking about puppets in the theatre, writes that “if the actor plays the part of a person, the doll/puppet plays the part of the actor,¹³ and becomes the image of another image” (Lotman 1980[1978]: 149).¹⁴ This is certainly true if we refer to a puppet

¹³ The word ‘actor’ is not used as the term that in generative semiotics has replaced the concept of ‘character’ (i.e. the union of an actantial role and a thematic role), but it rather indicates ‘the stage actor’, a person interpreting a fictional character. Lotman is saying that puppets in animation theatre hold the position that the human body holds in live theatre.

¹⁴ On the relation between actors and puppets see also the polemics between Zich and Bogatyrev. For Zich puppets could be either perceived as inanimate objects, thus creating

show, but, in some measure this description could be applied also to playfulness. During child play, dolls and toys represent people, animals, objects and machines in a staged spectacle that the players create for themselves. Dolls and toys, therefore, do not play the role of characters, but of actors: the same doll can embody several babies and the same little soldier can die a hundred times in different fictional conflicts. In this case the details of toys mentioned above become a restriction, a sort of *physique du rôle*: less detailed toys will be able to represent many different characters. The more a toy approaches the level of detail of a statue, the more it approaches the representation of a single character too. If a generic Lego mini-figure can represent many different characters, a figure of Superman will be stuck with the character described by its features. The more details there are, the fewer possibilities will the player have to exercise his or her own authorship: a toy that represents a specific character brings with its appearance a set of competences and of possible narrations. An example that shows the closeness between the most detailed toys and statues is the so-called “action figures”: three-dimensional images of characters from cartoons, films or comics that are collected by adults as decorations. The action-figures have more details than the corresponding toys; thus, they are more expensive – and can safely be considered as statues.

At the end of the article Lotman states that a doll “creates a new world in which the player duplicates his life” (Lotman 1980[1978]: 150). Already many other scholars have defined the world of play as a secondary world, parallel to reality, but it is interesting that Lotman identifies dolls (and thus toys) as the key for the creation of this “new world”. Toys provide a material representation of the world of play, they make it present in the real world: their features, their lack of details, but also their being soft, light, and harmless, allow creating a safe environment in which the players can repeatedly experience real life situations without danger (Lotman 2011[1967]).

3.2. Toys and autocommunication

Toys, as we have seen in the previous section, are a *semiotic* object, as they involve the creation and transmission of meaning. We can safely claim that toys are generally iconic signs, as they are replicas of real or fictional objects.¹⁵ However, as Lotman

a sense of comic and grotesque, either as living beings, creating a sense of mystery and enigmatic. Bogatyrev criticized this view stressing the point that all artistic products can be perceived either as signs belonging to a system or as material objects. The ability to interpret those symbols is the ability to properly “read” an artistic text; see Bogatyrev 1983.

¹⁵ Of course, many items used in play are not replicas, as for example balls, playing cards, roller-coasters and so on. A ‘toy’, however, is described as “an object for a child to play with, typically a model or a miniature replica of something” by the Oxford Online Dictionary. In this paper, therefore, the term is used accordingly.

clearly points out, the meaning of toys is only partially given to them by their crafter, but, due to their lack of details, it is the players' task to make sense of them. For this reason these replicas are immediately perceivable as such. It is similar to the case of a replica of a replica, in which, according to Lotman (1990: 55):

The object and its representation are so glaringly not equivalent, and the transformation of the representation in the process of replication is so obvious, that attention is naturally drawn to the *mechanism whereby the replica is made*, and the semiotic process becomes a conscious one rather than a spontaneous one.

Toys, therefore, are hardly mistaken for their referents, but it is possible for players to overcome their fictionality with playful behaviour and pretend there is a certain degree of equivalence between the sign and the referent.

In order to understand the position that toy-play holds in culture, however, it will be useful to investigate a little more its communicative characteristics. Toys, being iconic signs, have a direct, explicit relationship with their referents. Toy-signs' place in discourse is often isomorphic to the position held by their referent (a toy policeman will probably chase toy thieves as well, while a toy sword's function is to pretend to cut other players or imaginary enemies). Less detailed toys, depicting, for example, a generic human being without any thematic role, are open to a wider set of interpretations, in order to remedy the limitations of the sign system: with only a limited number of versatile toy signs the players will still be able to create many different narratives.

Toy-play, however, appears also to have an implicit underlying semantic system, which is mainly metaphoric. According to Winnicott 2005[1971], children playing with toys re-enact the ideas that occupy their lives. In particular, the creation of a scene using toys is strongly influenced by the symbolic values attributed by the players to the different toy-signs. In other words, the players' utterance has two layers of possible interpretations: one is about the scenes and events narrated in the play session, and the other is about the self-expression of the players. Both these messages, however, are almost impossible to decode and interpret otherwise than by the senders themselves and (potentially) the designated receivers – who are, most of the time, the same people. When players want to share their play session with others or with an audience, they must verbally explain every sign they use in order to make its meaning explicit. Due to the difficulty of interpretation of toy-play semantics, playing with toys mainly assumes the form of a monologue: the players play alone, fully focused and do not need an audience. The players choose the toy-signs to use and, after giving a particular meaning to each, start to build a scene and to develop a narrative.

The metaphoric re-enactment of the player's life is not a simple unconscious reflex, but can also be considered an act of self-communication.¹⁶ Winnicott (2005[1971]: 59) writes that a child playing with toys is probably communicating with himself:

This child would have been liable to play just like this without there being anyone there to see or to receive the communication, in which case it would perhaps have been a communication with some part of the self, the observing ego.

In other words, toy-play pertains to the culturally relevant activity that Lotman (1990) defines as “auto-communication”. According to Lotman (1990: 22):

In the I-I system the bearer of the information remains the same but the message is reformulated and acquires new meaning during the communication process. This is the result of introducing a supplementary, second, code; the original message is recoded into elements of its structure and thereby acquires features of a new message. [...] the I-I system qualitatively transforms the information, and this leads to a restructuring of the actual I itself.

In this case the “second code” is the “toy-language” and, according to this point of view, its peculiar rules and limitations are meant to complicate the re-coding and, eventually, allow the rise of new meaning. Toy-play, therefore, could be considered also as one of the multiple strategies that culture uses to enrich itself.

4. Modelling unpredictability

As we have seen above (Section 2.1), Lotman stated that play models randomness (Lotman 2011[1967]: 256). Unpredictability is a key concept in Lotman's theories and is related to the idea of semiotic explosion (see Lotman 2009[2004]). In this paragraph we will use as a starting point an article in which Lotman focuses on playing cards and then we will investigate the importance of randomness and unpredictability for play and especially in the more recent developments of digital gaming.

¹⁶ One could object that players with toys are not always alone, but often play in groups. Despite some differences – a contact is generally made, a theme chosen, there is a distribution (sometimes “appropriation”) of toys, and thus of communicative power – it is important to underline that, even if it involves a great deal of communication between the players, playing together is not about communicating with each other using toy-play language, but it is an activity of co-authorship, in which each player tries to create his or her own narrative inside a collective utterance.

4.1. Cards and games in Russian literature of 19th century

“The theme of cards and games in Russian literature of 19th century”¹⁷ is another paper by Lotman that indirectly focuses on play. This article, first published in *Sign Systems Studies* in 1975, is, in fact, mainly about Russian literature and focuses especially on Pushkin’s “The Queen of Spades”. Card games were not an unusual topic for the Tartu-Moscow semiotic school: already in 1962 Lekomceva and Uspenskij gave a speech at the first Symposium on Modelling Systems that focused on *cartomancy* as a semiotic system, a work further developed in an article published in 1965 under the title “Describing a semiotic system with a simple syntax” (cf. Lekomceva, Uspenskij 1977[1965]). The two scholars investigated the fact that playing cards can be seen as a language featuring a very simple syntax that, nevertheless, is considered to be able to “program” the future. Lotman himself, who knew their work, stresses in his paper the fundamental ambiguity of cards, that are at the same time playthings used to recreate reality in a fictional world, and also tools used to program the future of this very reality. This duplicity of cards has to be always kept in mind in order to understand their importance in modelling and culture.

As already mentioned, Lotman’s article focuses more on literature than on play; thus it is not surprising that it is in an explanation of the representation of card games in literature that the first description of how a game occurs can be found:

[...] the unit is each “round”, enclosed between the “beginning” and the “end” of the action, the former being marked by a transition from an undisturbed and non-signifying state (the non-being, from the point of view of the game) to actions directed towards a radical improvement of status (win). The psychological condition of the hero at this point of the plot is one of hope. (Lotman 1978: 469)

If we exchange the word ‘character’ with the word ‘player’ this short text can be read as a description of the development of games. Lotman underlines the importance of the game being separate in time, having a beginning and an end (a concept often stressed also by game scholars, such as Huizinga 1949 and Caillois 1967). He also identifies the objective of the game in a status improvement, from mere ‘player’ to ‘winner’. The most original feature of this definition, however, is the presence of *hope*. Lotman includes hope because it is a common trait of the characters in the texts he approaches in this paper and because, of course, it is strongly connected with gambling. If Caillois (1967) wrote that the outcome of a game must always be unpredictable and Lotman (2011) wrote that a game would come to an end if one of the players lacks the possibility to choose, we can also claim that without hope play would become impossible as well:

¹⁷ In Russian “Тема карт и карточной игры в русской литературе начала XIX века”; for a translation into English, see Lotman 1978.

when there is an absolute certainty that one of the players will lose, the struggle loses its meaning and it will probably end with a forfeit.

Another topic touched in this article that is of major importance for us is randomness. In the first paragraph we saw that Lotman considers play to be able to model randomness, and this feature becomes even more important when we focus on gambling games. In 19th-century Russian culture gambling was considered in a strict relation with fate. Commercial games (i.e. games in which the ability of the players grant them victory) were considered as completely different from gambling games, which, being random, were considered socially unacceptable. Through gambling players could win, or lose, enormous amounts of money, regardless of the fact that they had no human opponent. In gambling games, therefore, the opponent was fate itself and fate cannot be overcome. Winning against it always coincides, in a certain measure, with death (Lotman 1978: 486). In this period, then, play does not only model randomness, but it becomes a metaphor for fate itself.

While literary works represent a play that is “controlled” by fate, in reality the point is that it contains a great amount of randomness – fate is merely the reconstruction of an intelligent will behind chaos. According to Lotman, if the game of cards became so important in 19th-century Russia, it was because of its important cultural role. Games, therefore, can be

[...] cybernetic mechanisms which are used by a culture as a whole to heighten the internal non-determinateness of the system and to introduce probability links into several of its couplings. (Lotman 1978: 488)

Play, therefore, is an instrument of culture, and its inner randomness becomes a way through which culture is able to enrich itself.

4.2. Play and explosion

In Lotman’s late works, one of the main topics has been the concept of *explosion*. The moments of explosion are described as moments of unpredictability:

The moment of explosion is the moment of unpredictability. Unpredictability should not, however, be understood as constituting a series of unlimited or undefined possibilities for movement from one state to another. Each moment of explosion has its own collection of equally probable possibilities of movement into a sequential state beyond the limits of which lie only those changes which are flagrantly impossible. The latter are excluded from the discussion. Each time we speak of unpredictability we have in mind a specific collection of equally probable possibilities from which only one may be realised. (Lotman 2009[2004]: 123)

Explosions, both in history and in art, are links between the present and the future or between a current state and its potential consequences and developments. A typical way of dealing with the unpredictability of the future is, in fact, play, in the form of fortune telling. In the previous paragraph we already mentioned Uspenskij's and Lekomceva's work on cartomancy, but also Egorov 1977, Corti 1973, and Aphek and Tobin 1989 have underlined the links between games and fortune telling. Cartomancy transforms the unpredictability of the future into a tool that allows the exploration of possible worlds. The cards and rules of cartomancy create a boundary within which the fortune teller can exercise his fantasy freely. Every card represents either a subject or a predicate (Egorov 1977) that will influence and change in some way the future of the person whose future is being told and the only situation that is not taken into consideration is the one in which nothing happens. The very moment of fortune telling, thus, is an *artificial* moment of explosion, a starting point that *has to* lead to countless possible futures. Cartomancy is a playful representation-in-scale of a moment of explosion. In a cartomancy session, each card that is distributed is the outcome of a wide range of possibilities, but when all the cards are distributed the outcome seems the only one possible.

Lotman himself shows that playfulness plays an important role in the understanding and the creation of explosions. In *Universe of The Mind*, for example, Lotman (1990: 75) describes how Dostoevsky “plays” with the plot of *The Devils*:

This changeover, if we continue looking at the history of the writing of *The Devils*, is expressed in Dostoevsky's plans, his summary enumeration of episodes which thread themselves along the syntagmatic axis of the narrative. However, as soon as this tendency to *exposition* or narrative construction can be observed, we are witness also to a growing inner opposition to this tendency. Each serious movement of the plot Dostoevsky immediately smothers with variants and alternative versions. The wealth of Dostoevsky's imagination which allows him to ‘play over’ a vast quantity of possible story-lines, is truly amazing. The text in fact loses its linearity. It turns into a paradigmatic set of possible lines of development. And the same thing happens at almost every turning point in the plot. The syntagmatic construction is replaced by a multidimensional space of plot potentialities.

Dostoevsky explores the possible worlds originated from his plot recreating *in vitro* several real-world explosions. Each turning point of the plot becomes a moment of explosion, and the author finally creates a text that is not linear any more but is “a paradigmatic set of possible lines of development”. The same paradigmatic structure is featured by games. In a game, every move is a moment of explosion and many different possible developments originate from each one of them. This is true for games like chess and backgammon, but is much more evident in games that focus on a narrative. A game-book and a role-playing game share the same structure with Dostoevsky plans:

multiple sets of alternative pieces of narrative, connected by turning points in the plot, among which the player/author will choose a single, definitive, storyline.

In *Culture and Explosion*, we can find another link between playfulness and explosions:

The historian may be compared with the theatrical spectator who watches a play for the second time: on the one hand, he knows how it will end and there is nothing unpredictable about it for him. The play, for him, takes place, as it were, in the past from which he extracts his knowledge of the matter. But, simultaneously, as a spectator who looks upon the scene, he finds himself once again in the present and experiences a feeling of uncertainty, an alleged “ignorance” of how play will end. (Lotman 2009[2004]: 126)

The historian is not only a spectator, but also a player, because he chooses to forget, for a moment, his historical knowledge in order to *enjoy* history as if it was fiction. In this way he pretends to ignore the outcome of the explosion and allows himself to entertain all the possibilities, to imagine all the potential worlds of counterfactual history. This way of dealing with history is similar to the so-called “what if...?” games and is typical of several forms of childish play.

In conclusion, we have underlined two different relationships between playfulness and Lotman’s idea of explosion:

First, play, thanks to its “explosive” structure, can be used to create artificial explosions. On the one hand, play is exploited by artists in order to explore the possible worlds that they have created and to weave the storyline of their works. On the other hand, play can also become a model of reality: when links are drawn between elements of its repertory and elements of the real world, playing the game models and programs the future.

Second, the real-life moments of explosion sanction only one actual outcome from among countless possibilities. All the other possibilities, *a fortiori* not true, can be exploited in a culture in a playful way to look at its history and explore alternative presents. It is not only historians who wonder what could have been, had an explosion produced a different outcome: the fictional concepts of *uchronia* and *counterfactual history* are largely exploited both in literature and in cinema. In this way, a culture is able to look back at itself from a renewed point of view and understand better many of the features of the present.

4.3. Alea and procedural generation

The central importance of randomness in games is also particularly evident in Caillois’s theories (Caillois 1967). According to the French sociologist there are four forms of play: *agon*, which is competition; *mimicry* that is based on fiction; *ilinx* or dizziness;

and *alea*, precisely randomness. *Alea* comprises all kinds of play based on chance and randomness and designates:

All games that are based on a decision independent of the player, an outcome over which he has no control, and in which winning is the result of fate rather than triumphing over an adversary. Perfect examples of this type are provided by games of dice, roulette, heads or tails, baccarat, lotteries etc. Here, not only does one refrain from trying to eliminate the injustice of chance, but rather it is the very capriciousness of chance that constitutes the unique appeal of the game. (Caillois cited in Salen, Zimmerman 2006: 133)

Caillois' typology has often been criticized, in particular for his claim that it is impossible to conjugate some forms of play as, for example, *alea* and mimicry (which are, on the contrary, the very basis of role-playing games). However, his terminology is still widely used and his work highly influential.

Both Caillois and Lotman make reference to "fate" that seems to control randomness, and both focus on gambling games in particular. Nowadays, however, digital gaming dramatically complicates the question. If choosing a card from a shuffled deck provokes a moment of artificial *explosion* and unpredictability, on the other hand, digital technologies' computing power is able to combine *thousands* of related explosions, all intertwined in a closed system, and in this manner build up entire, totally unpredictable, virtual worlds.

This is the case with *procedural generation*. 'Procedurality' is defined as the ability of a medium to execute series of rules and conditions, composed by interlocking algorithms defining how an interactive system will react to the users' inputs (Ferri 2009: 16). Procedural generation, then, indicates the systematic production of content through a series of algorithms – a technique which is increasingly more exploited by digital game designers in order to create unlimited play possibilities and enhance the *re-playability* of a game. Through procedural generation it is possible to create entire virtual worlds: planets, characters, buildings, narrations, all randomly generated and unpredictable even for the developers of the game.

Hence, once implemented, procedural generation works as a system of digitally simulated explosions, almost instantaneous and completely independent from the players or the developers. Programs exploiting procedural generation frequently involve unpredictable meaning-making. However, there is no intentionality behind the creation of new content nor the ability to interpret it – only to make use of it. Interpretation is still a prerogative of humans, as well as the authorship of the procedures that the machine will follow to generate new content.

Procedural generation, then, is not the first step toward the rise of artificial creativity, but more likely a kind of digital text – as was shown in Section 2.1, already

hypothesized by Lotman – which goes beyond the mere storage of information and becomes capable of creating new meaning.

5. Play and culture

Sections 3 and 4 above claimed that play is one of the mechanisms that culture uses to enrich itself. In particular, we focused on toy-play as a form of autocommunication and on the importance of *alea* – or unpredictable randomness – in increasing the internal indeterminacy of the system and thus increasing its potential of creating new meaning.

This section will continue to follow this thread as it investigates both the role and the place that play holds in our culture. On the one hand, then, we will underline the importance of play in order to increase the amount of meaning-production in a certain culture; on the other hand, we will try to reconstruct briefly the dynamic position of play and games in the *semiosphere* of modern Western culture and, in doing so, to explain the phenomenon of *gamification*.

5.1. Playfulness and meaning production

In one of Lotman's first works on the semiotics of culture, "Primary and secondary communication-modelling systems" the author traces the first draft of his theory of culture and modelling systems. In particular, Lotman focuses on the importance of individuality and translation in culture.

In short, Lotman says that each mental subject translates the same reality into his own individual language in a different way. When these descriptions are retranslated into the common language they give birth to different texts that describe the same object in different ways, providing a stereoscopic quality to culture. The incomplete mutual translatability of individual languages, therefore, must not be considered as a structural defect, but as a resource. Lotman (1977[1974]: 97) states that:

It would be possible to show convincingly that certain cultural mechanisms work in the direction of making it difficult to decipher a text adequately; the more complex the structure of a message, the more individual is its interpretation by each recipient of the information.

The fact that the wide range of combinatory possibilities of semiotic systems is part of the mechanism that makes the culture rich, can be fruitfully combined with what Lotman said on games being "cybernetic mechanisms which are used by a culture as a whole to heighten the internal non-determinateness of the system" (Lotman 1978: 488).

Therefore, according to this claim, it could be stated that the role of playfulness in culture is to increase the number of possible semiotic correlations in order to maximize the necessity of individual interpretations, and hence enhance the rise of new meaning. In other words, play complicates communication and in doing so it enriches culture.

Once again, play appears to be close to art, which is the central topic of Lotman's paper. In particular, he focuses on the status of poetic language as a modelling system. On a scale that starts from unambiguous languages such as the language of street signs and goes in the direction of a higher degree of ambiguity, poetic language would be situated at the end of the scale. If street signs are monosemic, poetic language completely excludes the possibility of a single meaning shared by every receiver. This complexity is intended as one of the main features of art, for it is the great number of possible interpretations that makes artistic texts long-lasting and always capable of communicating new meaning.

Play and art, again close and different, seem to share the same cultural goal: increasing the entropy in a semiotic system, being at the same time regulated by rules and grammars. This ceaseless tension between chaos and rules, between the impossibility to communicate and a meaningless communication, is exactly what, in the balance, makes human communication possible and meaningful.

In his later works, Lotman returned to underlining the importance of culture-enriching mechanisms. In the first part of *Universe of the Mind* (1990), entitled "The text as a meaning-generating mechanism", Lotman analyses several of these mechanisms, among which are the combination of translatability/untranslatability and the use of rhetorical figures and tropes. In his analysis of the cultural role of rhetoric, Lotman focuses on the coexistence of discreet and continuous types of text-generators at all levels of culture:

Thus both the individual, and the collective consciousness, contain two types of text-generator: one is founded on discreteness, the other is continuous. In spite of the fact that each of these mechanisms has a self-contained structure, there is a constant exchange of texts and messages between them. This exchange takes the form of a semantic translation. But an accurate translation presupposes that mutually equivalent relationships have already been established between the units of the two systems, as a result of which one system can be represented in the other. This is what makes it possible for the text of one language to be adequately expressed in another one. However, when we are dealing with discrete and non-discrete texts, translation is in principle impossible. [...] yet it is precisely in these situations that efforts to translate are most determined and the results most valuable. For the results are not precise translations, but approximate equivalences determined by the cultural-psychological and semiotic context common to both systems. This kind of 'illegitimate', imprecise, but approximate translation is one

of the most important features of any creative thinking. For these 'illegitimate' associations provoke new semantic connections and give rise to texts that are in principle new ones. (Lotman 1990: 36, 37)

The translation of discrete texts, thus, into continuous texts is very fruitful because of the gap in the material to be translated, a gap that has to be filled with creativity.

This combination of different types of text-generators is also present in games, especially in games that feature a solid system of rules. Playing these games can be considered an activity of translation from a discrete text (the game, intended as a set of rules, pieces, narratives, algorithms and any other kind of components) into a continuous text (a single play session, which is the result of the interaction between one or more players and the game), and therefore imply the realization of all the valuable results described by Lotman.

These twin texts, the game and the play session, are strictly related and yet extremely different.

Firstly, they are only partially overlapping: the rules describe a large set of possible actions and situations, some of which may not occur in the actual play session. On the contrary, it could happen that a situation unforeseen by the rules arises in the session, requiring the intervention of an authority, usually some sort of a referee.

Secondly, the discrete text is an *incomplete* text: the player has to fill the blanks with his own choices, and choices are what makes translations mechanisms of meaning generation (Lotman 1990: 14). The meaning stored in the discrete text is only a hint of the meaning that will be actualized by the continuous text. The creation of meaning, thus, occurs mainly in the act of translating and interpreting it, which is, in fact, the act of playing.

Finally, we should underline that the discrete text is *meant* to be translated. If, for example, a poem can be translated into another natural language in many different ways, this does not mean that the artist created the poem for this purpose. The rules of a game, on the other hand, are established expressly to be translated in a (potentially) infinite number of play sessions; they are basically a set of instructions for creating new textualities.

It has to be pointed out, however, that a play session is only partially continuous. Games often have very precise time patterns, featuring openings, half-times, turns, phases, time-outs and so on. From this point of view, game-play is similar to the theatre. According to Lotman, the latter is analogous to real life for its continuity and movement, but also different because it divides the stream of events into segments (Lotman 1990: 59). This characteristic is what, according to Lotman, makes theatre so influential both for representational arts and for life itself (Lotman 1990: 60). Being a sort of translation code between fiction and reality, games have always had

an important modelling ability. Life itself has often been referred to as a game, and the “theatre of everyday behaviour” (Lotman 1990: 60) consist mainly in role-playing, which is of course artistic, but also, by definition, playful.

5.2. Gamification and the semiosphere

Gamification – that is, applying game mechanics, dynamics and elements to non-playful situations – is an emerging cultural trend the study of which is currently quite popular in academia. In this paragraph we will try to show how this phenomenon, as well as the increasing relevance that playfulness holds in our culture, can be properly described with Lotman’s theory of the semiosphere.

In recent years, many articles and books have been written about gamification, even if most of them focus mainly on the ways gamification can be applied fruitfully to business or to promote social change (see McGonigall 2011; Werbach, Hunter 2012). The most insightful book on the topic, in my opinion, is probably Ortoleva 2012a,¹⁸ in which the author investigates gamification as part of the larger cultural trend that sees an increase of the relevance of playfulness in Western culture. In particular, Ortoleva claims that playfulness may be occupying the place of sexuality as our cultural “obsession”. He states that in the last century many cultural areas such as economy and entertainment have undergone a progressive “sexualization”. As this “century-lasting strip tease” is almost come to completion (the sexual taboos are almost completely gone, with the important exception of paedophilia) the modelling ability of eroticism is decreasing, and a new model will soon have to replace it. This model, according to Ortoleva, will probably be playfulness and, in particular, games.

We should not forget, however, that for a long time play has been relegated to the periphery of culture. Playfulness was considered childish, and children were not considered as participants in culture. For a long time children held a position similar to “savages”: they were considered as someone with no culture, but only bizarre, sometimes fascinating, customs. Both the child and the savage needed to be educated: their “silly customs” replaced with more “serious” occupations, recognized by the mainstream culture. Even Roland Barthes complains in his *Mythologies* (1957) that French toys are mainly miniatures of the tools of adult life, designed with the objective of transforming children into reduced-scale adults.

Nowadays, however, the situation has changed thoroughly. The existence of “game studies” proves how the interest in play and games is increasing both inside and outside of academia. Gamification, on the other hand, is the evidence that the modelling ability

¹⁸ In English, see also Ortoleva 2012b, *Homo ludicus*. The ubiquity of play and its roles in present society. *GAME Journal* 1; available online as <http://www.gamejournal.it/homo-ludicus-the-ubiquity-and-roles-of-play-in-present-society/>.

of games is now extremely productive, and business and politics try to imitate its mechanics, increasingly perceived as more prestigious.

This cultural mutation, as we suggested, can be analysed as a part of the dynamics of the semiosphere. The latter was theorized by Lotman as the semiotic analogy of Vernadsky's biosphere. Lotman (1990: 123–124) defined the semiosphere as:

The semiotic space necessary for the existence and functioning of languages, not the sum total of different languages; in a sense the semiosphere has a prior existence and is in constant interaction with languages.

Lotman, however, quickly abandoned the universalistic version of the theory of the semiosphere and would rather use this term to refer to the semiotic space of a single culture:

At the same time, throughout the whole space of semiosis, from social jargon and age-group slang to fashion, there is also a constant renewal of codes. So any one language turns out to be immersed in a semiotic space and it can only function by interaction with that space. The unit of semiosis, the smallest functioning mechanism, is not the separate language but the whole semiotic space of the culture in question. This is the space we term the *semiosphere*. (Lotman 1990: 124–125)

This interpretation of the term is the one that made this theory one of Lotman's most successful intuitions and it is also the one we will take into account in this section.

New sign systems and languages always first appear in the periphery of the semiosphere, and so it happened with digital games in the 1980s. Playfulness, as we have seen, was also relegated to the periphery, together with many different types of “nerd” games, such as role-playing games or miniature war-games.

In the beginning, this new sign system was generally misunderstood and was not welcomed: digital games faced a lot of prejudice and were believed to make players stupid or violent. This is, in fact, a normal reaction that occurs when a culture is confronted with a new language that appears in the semiosphere – it is the case of the *avant-garde* (Lotman 1990: 134).

A peripheral position implies proximity to the boundaries. Lotman is very clear in stating that boundaries are all but insurmountable: they consist in porous spaces of translations and constitute the more dynamic and productive area of the semiosphere (Lotman 1990: 131–142). In the 1980s, when digital games first appeared, the boundaries of the semiosphere of Western culture were very busy translating many aspects of Japanese culture. Japanese economy was at its peak and many aspects of its technology (cars and electronics) and figurative arts (manga and anime) were translated and adopted by the Western world. This had a very strong impact on the newborn digital games, magnified by the fact that many of these were, in fact, “Made in Japan”.

The relationship with Japan, however, has lost importance with time, as the sign system started to move from the periphery towards the centre. One of the main causes of this movement is, undoubtedly, the generational turnover: the disobedient youth grows older and its languages, once marginal, became central – the rebellion becomes an institution.¹⁹

The movement towards the centre is accompanied by a new self-awareness as the sign system is proposed as a metalanguage able to describe the whole semiosphere (Lotman 1990: 135). If in the 1980s describing reality as a digital game was merely a cyberpunk trope, it has become more and more fashionable throughout the years, leading to gamification theories that conceive of most of human interaction as playful and game-like (see McGonigall 2011; Werbach, Hunter 2012).

At the same time, this movement triggers a dialogue (Lotman 1990: 143–150) with the other sign systems of the central area of the semiosphere which, in turn, start to develop a metalanguage capable of describing games more accurately. This is the reason of the proliferation of books and films about digital games, as well as adaptations of digital games. This dialogue is still ongoing, stronger than ever, in our digitalized culture and often it expresses itself through *transmedia storytelling* in which different sign systems share their meaning in an entangled net of translations (Scolari 2013).

Nowadays, playfulness has reached the centre of the semiosphere, releasing most of its modelling potential. Old games and game styles have begun to be perceived as “classics”, leading to the birth of retro-gaming and several forms of nostalgia.

Being in the centre of the semiosphere, however, leads towards immobility: the centre is less productive, more rigid and self-referential than the periphery. In order to remedy this looming rigidity, many new peripheral elements – such as new technologies, indie aesthetics and non-photorealistic graphic regimes – are nowadays increasingly being adopted by digital games (Thibault 2016).

Finally, the movement towards the centre of the semiosphere may have been possible also thanks to the weakening and impoverishment of what previously securely occupied the central position – which, according to Ortoleva, was sexuality. This, of course, does not mean that games are replacing sex as practices, but that the communicative power and modelling ability of sexuality is decreasing, while games are becoming more and more capable of functioning as a working model of culture. This is not to say that people play more today, but rather that play is increasingly becoming the prevailing way we use to describe our society.

¹⁹ See, for example, the trajectory of denim *jeans* which were the clothes of the working class, but the become a trend among young people. The generational turnover saw a spread of jeans over the whole domain of culture until it became a neutral apparel – which is the most important feature of semiotic systems of the centre (Lotman 1990:141).

In this section the theory of the semiosphere allowed us to reconstruct a brief history of the critical reception of play and of digital games, and would even shed some light on the more recent cultural trends. Proceeding from this theory we can also make a cautious forecast: in the future the importance and influence of play will increase even more and the next generational turnover that will bring along the cultural hegemony of digital natives will probably correspond with the peak of play's modelling ability. It is also for this reason that today the study and analysis of play are more important than ever: our ability to understand our culture goes hand in hand with our ability to understand what lays at the centre of our semiosphere.

6. Art and play

The question whether or not games are a form of art is much debated by game scholars, boosted by the fact that in 2012 the Museum of Modern Art in New York bought 14 digital games for its Applied Design exposition. Paola Antonelli,²⁰ who announced the acquisition on the MoMA website, stated:

Are digital games art? They sure are, but they are also design, and a design approach is what we chose for this new foray into this universe. The games are selected as outstanding examples of interaction design – a field that MoMA has already explored and collected extensively, and one of the most important and oft-discussed expressions of contemporary design creativity. Our criteria, therefore, emphasize not only the visual quality and aesthetic experience of each game, but also the many other aspects – from the elegance of the code to the design of the player's behaviour – that pertain to interaction design.

Lotman, as we have seen, is categorical in saying that art and play, although similar, are in fact different and the two concepts should not be confused. In the next section we will deal with the ideas of *matrix* and *repertory* of a game, as a means to try to overcome this apparent impasse.

²⁰ Blog entry by Paola Antonelli "Video games: 14 in the collection, for starters" was published in 2012 and is available at http://www.moma.org/explore/inside_out/2012/11/29/video-games-14-in-the-collection-for-starters.

6.1. Matrix and repertory

The idea of digital games as matrices featuring different kinds of repertories has been first formulated by Ferri (2006, 2007).²¹ According to Ferri (2009: 16), games are not stable texts but rather:

[...] *matrices*, semiotic devices for the creation of *game-texts*. Each computer game is constituted by a matrix, a system of possibilities producing a single game-text each time a player interacts with it. [...] A game-text is a unique occurrence which constitutes a text that, although quite different from literary or cinematographic ones, is at least stable in its expression substance. Certain audiovisual portions are shown only in some game-texts: their variability suggests that the actualisable elements pre-exist in the matrix in a greater amount than what it is shown. Therefore, a matrix is an overabundant semiotic agglomerate existing before the formation of any single game-text and containing all the semantic, narrative and figurative resources that could possibly be actualized during the ludic activity. It is a complex semiotic object comprising different functions and different instances, such as victory-conditions, interfaces, links or semantic, procedural, figurative and strategic repertories.

To these interactive matrices, hence, belong three different kinds of repertories: the figurative repertory (images, music, animations, graphic algorithms); the narrative and strategic repertory (many narrative segments able to compose multiple plots and different narrations); and the semantic and value-related repertory (the values and axiologies in the game and their possible interactions with the avatar) (Ferri 2007).

Ferri's intuition is a rather clever way to counter all those peculiarities of games that make them unsuitable to be considered simply as texts. Nonetheless I wish to propose a slightly different theory that I believe may be more fruitful for our analysis.

First, I think that these concepts can and have to be applied not only to digital games, but to all forms of games and, eventually, of play (what is a toy set if not a figurative repertory?). It cannot be denied that digital games have their specificities, but I think that these have been overemphasized in game studies.

Second, in my opinion matrix and repertories should be considered as two separate entities. The matrix is what gives *form* to the content and the expression of the game, while the repertories are the *substance*. The matrix organizes both the variable succession of the events and the interface (digital or analogue) that allows the player to interact with the game. The repertories contain all the figures, roles, pieces

²¹ Ferri, Gabriele 2006. *Macchine narranti. Videogiochi e produzione di occorrenze testuali. In Narrazione ed esperienza. Per una semiotica della vita quotidiana.* (Proceedings of the XXXIV Congress of AISS. E/C – rivista dell'Associazione Italiana di Studi Semiotici) can be accessed on-line at http://www.ec-aiss.it/pdf_contributi/ferri_20_3_07.pdf.

of narratives and axiologies described by Ferri. In other words, the matrix deals with the axis of *process*, and the repertories form the axis of *system*. The matrix links and organizes a series of slots, which are filled by the elements of the repertory – each element being a text or a textual fragment.

6.2. The meaning of play

Section 1 claimed that Lotman considered play incapable of creating any new meaning²² and that the sole objective of playing a game was following the rules. It was also pointed out that this could seem a paradox considering the fact that games and digital games often feature strong, creative and immersive narratives.

In order to understand this apparent contradiction we should remember that Lotman defines play as something that has no content or – as Gadamer stated – something that is *pure form*. It appears clear, then, that Lotman's claim mainly focuses on the matrix – which *is* form – and ignores the repertories which are the substance. The matrix is what generates the process of playing – and, therefore, it is what matters most for a structural (or ontological) analysis of playfulness – and without the repertories it is indeed unable to create new meaning by itself.

The latter, in turn, are made up of a series of texts and textual fragments. These texts can be not only meaningful, but also properly artistic. Eye-candy digital game graphics as well as beautifully crafted chess pieces can safely be considered artistic texts, with all the properties described by Lotman. The same can be said for original soundtracks and well-written cutscenes.

In addition, the play session – which happens when the repertory is set in motion by the matrix – takes the shape of a narrative able to convey emotions: play, then, becomes something that can be experienced through what Lotman (2011: 260) defines as artistic behaviour:

The most important characteristic of artistic behaviour is that the person practising it simultaneously carries out two different actions: he experiences all the emotions that an analogous real-world situation would evoke and is, at the same time, clearly aware that there is no need to perform the actions related to the situation (for instance, helping out the hero). Artistic behaviour is a synthesis of the practical and the factitious.

²² It is true that in the other sections it was shown that that, according to Lotman's theories, some manifestations of play, such as toys, games and gambling, can be considered mechanisms that enrich the culture and lead to the creation of new meaning. This, however, it is not enough to define them as 'art'.

We must conclude that games and playful activities are both artistic *and* playful. Players mix the factitious and the conventional behaviour, follow rules and feel emotions at the same time, without forgetting that there is no need to perform what they are doing and aware that their actions and feelings are related to something that is not real. Only in this way, accepting this double nature as works of art and playful objects, is it possible to explain the growing importance and the central position that play – today more than ever – holds in the semiosphere.

7. Conclusions: The anatomy of play

This paper has explored different aspects of playfulness in light of the semiotics of culture. It started from its surface – the players' behaviour – and followed Lotman in search of the real nature of play: its twofold ontology. From the beginning it has been clear that Lotman's intuitions were similar to many game theories, but at the same time they were able to approach playfulness on a deeper ontological level. In the following, an analysis was conducted of a type of play (toy-play) and a form of play (alea) both already addressed, in some measure, by Lotman, showing that such key concepts as autocommunication, explosion and unpredictability are, in fact, a valid solution that makes it possible to approach more fruitfully playful texts and practices the framing of which in an unambiguous way would otherwise be very difficult. The next step was to focus on playfulness as a whole and to investigate its position and role in culture. Again, Lotman's theories on meaning-generation and on the semiosphere proved a solid basis to build upon, and made it possible to answer some theoretically complex questions, as well as clarify popular, but still unframed concepts as the one of gamification. Finally, on the most profound level, the ontological and structural differences and similarities between play and art were approached. Taking the concepts of matrix and repertory as a starting point, it proved possible to divide playfulness into parts and to trace a sort of anatomy of play.

There is a difference between a discrete mechanism of meaning generation – the game, and a continuous one – the play session. The former is a cultural artefact *per se*, the latter the result of its interaction with one or more players – an interaction that will lead to the actualization only of a portion of the possibilities inherent in the discrete text. Then the distinction was re-traced between matrix and repertories as two separate parts concerning the architecture of the process and the system, respectively. The distinction between matrix and repertories should not be confused with the distinction between the game and a play session; on the contrary: the sum of matrix and repertory consists in what was defined as 'the game', while their interaction operated by a player is what we call a 'play session'.

Play is therefore a complex cultural mechanism that combines two kinds of behaviour:

- playful behaviour (or lusory attitude) that allows the player to interact with the game and thus to transform the game (matrix and repertoires) into a play session;
- artistic behaviour, necessary to deal both with the texts and textual fragments present in the repertoires and with the play session itself, which has a narrative nature.

In conclusion, it can be seen that Lotman and semiotics of culture have indeed something to offer to game studies both as analytical tools and heuristic guidelines. Of course, there is still a long way to go to a Lotmanian semiotics of play. There are many types of play yet to be analysed, starting from digital games, but also role-playing games, board games, card games and sports, and the other three forms of play (mimicry, agon and ilinx) remain yet to be approached.

The creation of a general theory regarding all kinds of playfulness is still missing. However, I think that it is without doubt that semiotics of culture is a discipline capable of successfully harmonizing a multi-disciplinary approach under a single, epistemologically coherent, point of view – and thus it is the ideal approach to deal with the broad and complex phenomenon that we call ‘play’.

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Лотман и игра: игровая теория, основанная на семиотике культуры

Цель статьи – ознакомить с подходом к игре, основанным на семиотике культуры и, в частности, на работах и идеях Юрия Лотмана. Автор дает обзор работ Лотмана, посвященных игре и играм, начиная с его статьи «Искусство в ряду моделирующих систем», где всесторонне рассматривается феномен игры. Во второй части статьи исследуются некоторые лотмановские теории и идеи игры, чтобы осветить этот многосторонний и крайне интригующий аспект человеческой деятельности. Автор описывает некоторые основные вопросы теории игры: определение игры, культурная роль игрушек, важность непредсказуемости, позиция игры в семиосфере и, наконец, различие и сходство между игрой и искусством. Идеи Лотмана перекликаются с другими семиотическими и лудологическими теориями, предлагая весьма глубокий и актуальный взгляд на игру, а также демонстрируя высокий эвристический потенциал семиотики культуры.

Lotman ja mäng: kultuurisemiootikal põhineva mängulisusteooria toetuseks

Artikli eesmärgiks on tutvustada kultuurisemiootikal põhinevat ning eelkõige Juri Lotmani teostele ja ideedele toetuvat lähenemist mängule. Ühest küljest antakse ülevaade Lotmani teostest, mis on pühendatud mängule ja mängimisele, alustades tema artiklist, mis vaatab kunsti teiste modelleerivate süsteemide seas ning milles mängu kui nähtust sügavuti käsitletakse, ning mainides ka artikleid, mis on pühendatud mängu erinevatele vormidele, näiteks nukkude või mängukaartidega. Teisalt rakendatakse mõningaid Lotmani teooriaid ja ideesid mängulisusele, et valgustada seda äärmiselt vastuolulist ja põnevat inimtegevust. Seega puudutatakse mõningaid mänguteooria tuumküsimusi nagu näiteks mängu definitsioon, mänguasjade ja lelude kultuuriline roll, ennustamatuse olulisus, mängulisusele semiosfääris kuuluv positsioon ning lõpuks ka mängu ja kunsti vahelised erinevused ja sarnasused. Lotmani teooriad ja teosed, mis sageli lõimuvad teiste semiootiliste ja ludoloogiliste teooriatega, pakuvad äärmiselt paljutootavat ning värsket lähenemist mängule ja illustreerivad kultuurisemiootika kõrget heuristilist potentsiaali.