

Toyification. A Conceptual Statement

Mattia Thibault, Katriina Heljakka

▶ To cite this version:

Mattia Thibault, Katriina Heljakka. Toyification. A Conceptual Statement. 8th International Toy Research Association World Conference, International Toy Research Association (ITRA), Jul 2018, Paris, France. hal-02083004

HAL Id: hal-02083004 https://sorbonne-paris-nord.hal.science/hal-02083004

Submitted on 28 Mar 2019

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Toyification

A conceptual statement

Mattia Thibault
Post-doctoral researcher, University of Tampere

Katriina Heljakka Post-doctoral researcher, University of Turku

Abstract:

Our paper focuses on *toyification*. By this phenomenon, we point to two, parallel developments: 1) The increasing prestige of toys, which start to find their way in classrooms, art museums, fashion and so on, influencing in this way other languages, and, 2) The deliberate attempt to design products according to toy aesthetics in order to make them more appealing. More specifically, toyification communicates the idea of an entity (physical, digital or hybrid) being intentionally reinforced with toyish elements or dimensions; an object, a structure, an application, a character or a technology designed to acquire a toyish appearance, form or function.

Keywords: Adult play, design, gamification, ludification, playification, toyification

From Ludicisation to Toyification

This paper aims at defining and exploring the growing prestige of toys and of toyish aesthetics in contemporary culture—a trend we refer to with the term "toyification". In order to be able to approach toyification, however, we must begin with a clarification of the related phenomena of play, ludicisation, gamification and playification.

In 1990, Ernst Lurker predicted in his essay *Play Art: Evolution or Trivialization of Art?* some major transformations take place in society's attitudes toward play. Seven years later, renowned play scholar Brian Sutton-Smith noted that in a world that is becoming more play-oriented: sports, games, play and toys all may be perceived as vehicles for ludic escapades. He claims that "the ludic turn in Western

culture, the shift in sensibility that makes it possible to see contemporary living through the lens of play" (Sutton-Smith, 1997; Henricks, 2017, 7) has indeed come to influence how society expects products and services to cater for its needs. We are living in an "era of playful expression, a time in which play has become a cultural, social and economic centerpiece" (Sicart, 2018, 262).

We call this playful turn the "ludicisation of culture": a cultural trend (dating probably from the Enlightenment, from Rousseau's and Shiller's works on education) that see playfulness and games become more and more culturally relevant. The rise of digital games boosted this trend and nowadays all kinds of games, as well as other forms of play experiences, enjoy a new cultural centrality. Today, games are perceived as socially and culturally relevant, they become ways to describe our reality as well as models to shape our reality (Thibault, 2017b). At the same time, the cultural boundaries that used to define the contexts in which play may be acceptable are being deeply redefined (Idone Cassone, 2017).

Other terms have been proposed to describe the phenomenon. Raessens (2006) calls it "ludification of culture", while the expression "gamification of culture" has also been proposed. We opted for "ludicisation", a term introduced by Bonenfant and Genvo (2014). The term "ludicisation", differently from "ludification" is not based on the action of *making* something more playful or game-like (from the Latin *facere*, to do), but indicates a process that leads to a different perception of what is play and what is not. The process of ludicisation of reality then indicates how play is more and more perceived as a fundamental tool for describing and understanding contemporary culture. Ludicisation, then, means that society rethinks itself as play-oriented (Thibault 2017, 228-229).

Any approach to ludicisation immediately faces a methodological issue: How to *define* play. This is an old issue, and dozens of definitions of play and games exist, focusing both on the common characteristics of different play forms and the inner workings of playfulness. Some can be more impressionistic, as game designer Sid Meyers description of a game as "a series of interesting choices" (Rollings and Morris 2000: 38), while others can be more scientific (Huizinga, 1938, Caillois 1958, Suits, 1978). In fact, there are almost as many definitions of games as game scholars —Salvador (2015) states, with reason, that games scholars have a real obsession for definitions this might be because, despite their huge number, all these definitions fail to be truly universal.

Nevertheless, Wittgenstein, in his *Philosophical Investigations* (1953), claims that there is no common trait between all the phenomena that we refer to as "play"¹. The similarities between the various activities that we indicated with the term are shaped like a net, which is overlapping and criss-crossing, but never universal. According to the philosopher, there is not a single feature that is common to all the activities that we consider playful, from chess to ring-a-ring-a-roses, and therefore the word is not used to indicate an ontologically definite object. When we speak about play, therefore, we really refer to a series of phenomena merely characterized by a "family resemblance": some of them share a few characteristics with each other, but not in a systematic way.

After all, the fact that words do not necessarily describe definite objects – which is the main point that Wittgenstein was trying to make, being his main interest language - is widely recognised. Hjemslev—to make one example out of many possible—claimed that trying to define the meaning of the world with words is like casting a chart on the cloud: the articulations of the nebulous object are mainly arbitrary, and different cultures will propose different articulations.

Play is a complex and various set of activities and it will be useful, while dealing with ludicisation, to articulate this general trend in several cultural subphenomena such as gamification, playification and finally toyification.

Gamification

The term "gamification" originated in the digital media industry in 2008, become a buzzword in the 2010s, while the interest around it peaked in 2012-2013. The fact that "gamification" became such a successful buzzword seems to indicate that the centrality of play and its ability of being a cultural model might indeed be stronger than ever (Thibault 2017, 215). There are many definitions of what gamification is, generally revolving around the idea that we are dealing with the deliberate attempt of making something more enjoyable and/or engaging by making it more game-like and/or playful—often with the implementation of game mechanics and dynamics to non-playful activities (see Deterding et al. 2011). The supporters of this sort of operations claim that gamified activities are able to engage participants

¹ Wittgenstein, if fact, used the German word "Spiel", which can be translated both with "game" and "play". While official translations use the word "game" – and so does Wittgenstein himself in the Blue book (Wittgenstein1958) – we believe that "play" would be a more accurate translation. Among the examples made by Wittgenstein in the *Investigations* appear "ring-a-ring-a-roses" (Aphorism 66) and "when a child throws his ball at the wall and catches it again" (Ibid.), both examples of play that cannot be defined games.

in new ways and to motivate them to do tasks that they are not so eager to undertake. These passionate approaches to gamification, nevertheless, have sometimes faced criticism. More importantly, the efficacy of these methods is still debated: a study (Hamari, Koivisto & Sarsa 2014) points out that much of gamification's positive effects are greatly dependent on the context in which the method is implemented, as well as on the final users themselves. In other words, gamification does work, but only with certain people and in certain areas.

Until today, the areas in which gamification has probably been used the most are education and learning, were game mechanics are supposed to recall the students' passion for digital games and to spur them to study with more dedication. Manuals such as Salen (2007) and Kapp (2012) propose methods, strategies and instructions for teachers that want to implement gamification to their teaching activities and are becoming increasingly popular.

Business too has immediately seen the potential of gamification, and studies on the topic have immediately followed. Books such as Werbach and Hunter (2012) and Viola (2011), in the attempt to systematize the different ways games can be used to improve business activities. A lot of gamified activities have also been created in order to encourage healthy behaviours.

Playification

A reaction to the more rule-oriented applications of gamification was also the introduction of the competitor term "playification", which originated from researches on "meaningful gamification" (such as Nicholson 2012 and 2013)— which focused more on experiences than on scores—and on "meaningful play" (Scott 2012)—play activities designed to have specific educational objectives. Playification is still a rather blurred and unknown concept, broadly suggesting that play can be exploited for promoting social change and stressing the importance of fun, freedom and sociality).

In this paper, however, we will use this term in a rather different way: to indicate more free and unregulated playful activities that take place, unexpectedly, within ordinary life contexts. It encompasses, for example, phenomena like parkour (which transforms the urban space in an obstacle course) or flash mobs (which, with political or recreational intent, use public spaces as a stage for highly carnivalesque performances).

Toyification

Finally, toyification communicates the idea of an entity being reinforced with toyish elements; an object, a character or a human being acquiring a toyish appearance, form or function through intentional behaviour (Heljakka, 2014; 2015). More specifically, toyification communicates the idea of an entity (physical, digital or hybrid) being intentionally reinforced with toyish elements or dimensions; an object, a structure, an application, a character or a technology acquiring a toyish appearance, form or function. Many physical, digital and hybrid products of the proposed ludic age all demonstrate toyified tendencies: domestic objects such as kitchen appliances, furniture and interior decoration pieces, vehicles such as cars, technological devices such as mobile phones, tablets and digital cameras, entertainment products such as games and even food products such as cupcakes become increasingly toyified both on the level of their visual and tactile dimensions, as aesthetic qualities familiar from toys are employed in their design digitally and physically. Toyified entities invite to playful use both in a metaphorical and practical sense-they may be employed both in playful, imaginative scenarios and in terms of ludic manipulation.

If ludification is to be understood as a wide cultural trend according to which play could slowly be becoming one of the main aspects of culture, we could see gamification, playification and toyification as its main three areas of development. While the concepts of ludifisation/ludification, gamification and playification seem to be established terms in academic writing, an exhausting definition of toyification has so far been missing. The purpose of this paper is to propose a semiotic approach to toyification, an area of ludification that so far, has not been defined or theorized sufficiently. Let us begin our semiotic reflection of this novel concept by inspecting the meanings of toys, a crucial term to understand the origins of toyification.

What is a toy?

Our definition of toyfication, is not self-sufficient: in order for it to be meaningful, a definition of "toy" is also needed. Despite the common understanding of toys as objects for play, the term might not be so simple to define. Let's start by simply looking at the dictionary. The OED gives, as the first entry to the word toy: "An object for a child to play with, typically a model or miniature replica of something". The second meaning is listed as "An object, especially a gadget or machine, regarded as providing amusement for an adult". And, finally: "A person

treated by another as a source of pleasure or amusement rather than with due seriousness".

The first entry of the Merriam-Webster's Dictionary is also rather similar: "something for a child to play with". While the second one as some zoological connotations "something diminutive; *especially*: a diminutive animal (as of a small breed or variety)". Finally, the third, is the broadest one yet: "something that can be toyed with"—which seems to include the most part of the things in the world.

Last but not least, let's include also the definition of the popular online encyclopaedia Wikipedia, according to which a toy is "is an item that is used in play, especially one designed for such use. Playing with toys can be an enjoyable means of training young children for life in society. Different materials like wood, clay, paper, and plastic are used to make toys. Many items are designed to serve as toys, but goods produced for other purposes can also be used".

From these definitions we can see a few trends. The first one is the idea that generally toys are for children, while only people and technological gadgets² can be considered as adult toys. Many definitions of toys, in fact, limit their use to the realm of childhood play. For example, Smirnova states: "The main task of toys is the activation of age-specific child play" (Smirnova, release date unknown, n.p.). This is a rather outdated view on playfulness and toys that still reflects a strong stigma against childhood and against the freer forms of play. Adult toy-play is an often neglected but very interesting phenomenon (Heljakka, 2013), especially in the age of the ludic turn (Sutton-Smith, 1997): it would be unwise to limit the users of toys to children only, as the number of adults (or, 'kidults') purchasing toys to themselves is on the rise (even in reference to toy industry related research, see Euromonitor, 2018). Including adults in conversations around toys, finally, becomes particularly relevant when considering toyification. Therefore, we won't consider this trait as relevant to decide what a toy is or is not.

Another common trait is that of the dimension: toys are told to be "miniature replicas" or "something diminutive". If this is in part connected with the idea that toys are often designed for children—who obviously have smaller hands—we cannot deny that there is a strange playful attraction in all forms of models and miniatures. A change of scale seems to emanate a playful feeling and, while a change on the big side is still possible, miniatures are certainly easier to manipulate. However, not all miniatures are toys and not all toys are smaller replicas of existing things, thus this trait is insufficient to define a toy.

_

² See, for example, drones (Surace, 2017).

Finally, we have some irreconcilable statements: on the one hand, the idea that every object that can be toyed with is a toy, and on the other hand, the claim that toys are generally designed to be used as such. Toys, then, seem to range from potentially everything to rather specific objects. It would seem, then, that their exterior qualities are not enough to define a toy, but that, in fact, toys might have to be defined based on what we do with them and, more importantly, of how we "read" them, how we interpret them. In other words, we need a toy semiotics.

Toy semiotics

Toys are a rather complex set of signs. It is not easy to tell what a toy means, because its meaning is, in a way, not fixed. Brian Sutton-Smith (1984), for example, recognises the interpretative challenge posed by toys, consisting in the fact that their message is "that they signify some properties of the real world (dolls for babies, cars for automobiles), and yet at the same time paradoxically signify that they do not signify what those real objects signify".

Before Sutton-Smith, Eugen Fink (1969) claimed that toys are unique, among human artefacts, because they hold completely different values according to the perspectives adopted. According to Fink, from a non-playful point of view, most toys are perceived as being commodities: they are (industrially produced and commercial) objects covering the function of entertaining children. However, when a toy is seen from inside a playful context, it acquires an alternative value that transforms it into something different. In other words, if for a father the teddy bear that he gave to his children is simply an object to keep them occupied and entertained, for his playing children the toy will "come to life", at least in the fictional worlds of play. Toys acquire new values and meanings that are true only as long as the toys are considered as part of the play.

Toys have different meanings, then, according to the context in which they are used, playful or ordinary. But their semiotic richness of toys does not end there: even they playful meaning can be ambiguous. Meyers (2018) claims that there is a difference between toys as "cultural artefacts" (thus representing something of the culture of the players) and toys as "real" representations of the player's ego. This is, in fact, closely related to the observation made by Donald Winnicott (2005[1971]: 59) when he 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".

This aspect of toy-play, in other words, pertains to the culturally relevant activity that Lotman (1990) defines as "auto-communication": playing with toys can be a way for the players to restructure their own symbolic universe, their personality and their perspective on the world.

We have seen that toys may have several meanings, even paradoxically contradictory ones, but this has not yet helped us on understanding what toys are. Let's try to consider things from a different angle.

Many of the definitions that we have presented until now focus on objects that are purposely created to be played with and, in particular, to be part of play activities that make large use of pretend play and of what Caillois (1967) calls *mimicry*. This differentiates them from *playthings* such as the objects used in sports, dices, playing cards and in general all the objects used in other forms of play. However, we all know that it is very common to engage in these forms of play using objects that were not crafted for this goal (brooms, corks, buttons) or were not crafted at all (sticks, stones, leaves). When these objects are engaged in such a playful practice, there is no real difference between them and crafted toys.

It will be more constructive, then, to abandon the idea that "being a toy" is an ontological propriety of an object or that it is based on its use value, and accept that it is, in fact, a property determined by a specific practice. More than "toys", then, we should speak about "toying": an action that can transform—momentarily—almost every object into a toy.

We can define "toying" then, as an interpretative action, one that re-semantises an object in a playful way. In other words, "toying" means endowing something with a second layer of fictional meaning (Thibault 2017a). Toying is often followed by some toy-play: a playful interaction with the re-semantised object. This, however, is not necessary: several forms of adult play, such as the admiration of toys do not involve any physical interaction (Heljakka, 2013).

Someone could object that crafted toys have a higher degree of similarity to the objects and subjects they will represent within the fictional world of play. But this is not completely true, as it is quite frequent to use crafted toys to represent something quite different from what they portray: a naked and footless Bratz doll can very well represent an old man, in toy play (this specific example was observed by Nouri Esfaqhani & Carrington 2014). The concept of *iconism*—of interpretation based by similarity—is much less natural and neutral that it might appear, as Umberto Eco explains in detail in his Treatise of Semiotics (1975).

The relationship between players and toys, then, is always one in which the meaning of the toy is negotiated and modified by the players' interpretations. No

matter the richness of meaning that the creators infuse in a toy, the players are always allowed to change it. After all, one plays games but plays *with* toys (Heljakka, 2013; Levinovitz, 2017). The meaning of a toy is never fixed, Charles Baudelaire in his essay "The Philosophy of Toys" from 1853 uses speech act theory to define toys as objects carrying an invitation to play with their identity. According to Levinovitz, such an invitation depends not only on the intrinsic qualities of the object of play, but also its context and the identity of the player (Levinovitz, 2017, 267).

Levinovitz proposes that the way the toy functions is informative, not normative, just like an invitation (Levinovitz, 2017, 280). Therefore toy-play appears fundamentally different from gameplay, and a key difference is increased agency on the part of the player. In toy-play, objects are defined according to the subject's imaginative capacity and freedom (Levinovitz, 2017, 270). Nevertheless, the playthings used in games (both analogue and digital) can always become toys, if the players decide to ignore the rules of the games and to "toy" with them assigning them new meanings and engaging in toy-play (Thibault, 2017, 124).

If we were to propose here a complete semiotic theory of toys we should obviously engage not only on their semantics (as we have done here), but also with their syntax (see for example Erikson's 1977 work on the disposition of toys) and their pragmatics. This however would be beyond the point of this paper. What interests us here is that, even if any object can be used as a toy, throughout history (Crawford 2009) most human cultures have spent resources and energies in creating objects that have the purpose to be "toyed" with. These objects are rather different from anything else for a number of reasons. They reflect with their materiality our idea of what is playful, and therefore are often light (Bateson, 1956) and colourful (Heljakka, 2013). They represent things that adults want to teach to children (Barthes, 1957) and are sometimes criticised for how they represent society or gender (for a counterargument see Forman-Brunell & Whitney, 2014). They must communicate that they are toys and not the real thing, while still resembling them (Sutton-Smith, 1984), but also not have too many details to leave space to imagination (Lotman, 1980[1978]). Additionally, toys are cultural objects, designed to appeal a specific audience and therefore rooted in a specific context which brings us to the existence of a toy aesthetics (or, better, of many toy aesthetics).

These toy aesthetics is one of the core elements of toyification. In a way, we could claim that every time a toy is designed, we are facing a form of toyification, the

attempt to create something that is perfect for being "toyed" with. But things become even more interesting when it is objects of everyday life that are toyified.

Exploring Toyification

We have stated that toyification has to be understood in the context of the ludicisation of culture, i.e. that it is part of a wider phenomenon that sees several aspects of society and culture invaded by playful elements. There are, however, different ways of understanding toyification.

First, toyification could be seen as a sort of object-oriented version of gamification, where it not a system but a single object that is designed in order to make interacting with it more engaging and fun. Noxon (2006) states that "toyification" describes "how everyday adult stuff is getting less utilitarian and more toy-like". For example, "technology designers apply playfulness to increase user engagement with these products and to teach users how to apply new technologies" (Ferrara, 2012, in Sicart, 2018). As Sicart (2018, 250) notes, interfaces of machines have become more and more interactively and aesthetically playful.

Second, toyification has also been used to indicate objects that, without being used as toys, are designed to adhere to the toy aesthetics. Heljakka (2016; 2017) claims that: "Toyification communicates the idea of an entity (physical, digital or hybrid) being intentionally reinforced with toyish elements or dimensions; an object, a structure, an application, a character or a technology designed to acquire a toyish appearance, form or function". A toyified object, then, can be thought of in terms of being an object that looks like a toy, but may be used in doing something else than to play with. According to this perspective, toyification has taken a strong hold in current product development and marketing. Following this trend, some companies have been working to make their products more toy-like to appeal to people who might be feeling overwhelmed otherwise (Ihamäki & Heljakka, 2018).

Third, toyfication can also be identified with the current trend of employing objects designed to be toys in non-playful contexts. It is something that is being done in education (see for example Brant & Colton, 2008), research (see the "my research in 180 bricks" project at the LudoMaker of Paris 13 University), fashion (e.g. Chanel's tribute collection to Lego, Jeremy Scott's collection on Barbie for Moschino, Irregular Choice's shoe-lines) and design (Alessi kitchenware). Designed toys that are part of the collective imagination are the ones that most often are involved in these projects: Lego, Barbie, toy soldiers, HotWheels cars can be rather quickly

seen used outside playful contexts. These objects are not "toys" as we have defined the term (they are not "toyed" with) but are "designed toys": easily recognisable as things that are crafted to be toyed with, and therefore still able to invite playful attitude.

We believe that toyification entails all these three distinct trends and that those can be explained as an increase of the *modelling ability* of toys. Modelling ability is the capacity, described by Yuri Lotman (1974), of some cultural artefact or language of becoming a cultural model. "Model" in both senses of the term: models can be archetypes that will be later reproduced (as the prototype of a new project) but can also be attempts of describing and understanding something complex (as scientific models). Cultural models, then, are both *descriptive* and *prescriptive*. The higher their modelling ability, the higher their capacity to be used to explain and understand other things, as well as their influence in the creation and design of new things. If this conceptual tool has already been used to describe the ludicisation of culture (Thibault 2016), it can be also useful to understand toyification.

If we consider toyification as the increase of the modelling ability of toys, then this will have repercussions on two levels:

- 1) *Descriptive*: toys are seen as optimal tools to understand, explain and teach things. For this reason, they find their way in classrooms, art museums and universities.
- 2) *Prescriptive*: making things more toy-like is perceived as fundamentally a good idea in a world that is increasingly play-oriented, both in regards of their aesthetics and of their modes of interaction. Hence things are designed to be more toy-like or to globalise designed toys within their products.

Tracing tendencies of toyification in a ludicised world

It is important not to confuse objects designed to be toys and toyified objects. Whereas designed toys are created with the purpose of being used in a play activity, toyified objects, devices or entities do not have an intentional play-related functionality, even if they demand a playful competence to be understood (and used) as cultural products which carry a resemblance to toys. In other words, toys' functionality is dependent on their playability (or, rather, *toy-playability*, Paavilainen, 2018), whereas toyified objects, devices or entities have first-hand use

value outside of the context of play, and only titillate the playful state of mind in their viewers or users.

For example, toyified apparel carries a double-meaning: it functions first-hand as a type of clothing (whose primary function is to cover and to keep warm the body), but also indicates a playful attitude of the wearer, and invites the observer to share it. A vest made of plush toys, or shoes with bunny ears are worn to communicate the playfulness and ability of their user to "play", with all the cultural entails associated with in a ludicised culture.

To give another example, a Darth Vader toaster is a toyified kitchen appliance. It has both a practical purpose outside of the context of play (toasting bread) and a semiotic purpose of signalling its owner's passion for Star Wars and playful attitude towards life. The toyish appearance of the toaster, then, because of its aesthetics, can *also* be recognised as something playful and engaged as a toy—generally in the adult play form related to admiration and poseability.

The efficacy of toyification is strictly related with the ability of people that interact with it to "read" the object and perceive its reference to designed toys. In other words, the audience of a toyified object must be able to recognise that its aesthetics are typical of design toys. A handbag with a Lego brick shape can be recognised only by individuals that know what Lego are. If the core purpose of the object is often trivial to interpret, its toyified characteristics demand a *ludic literacy* (see e.g. Mäyrä, 2016; Heljakka & Ihamäki 2018). If this argument holds true, then, we may claim that toys are invitations to play, but toyified entities, from the perspective of their users, attempt foremost to evoke a playful attitude.

Gregory Bateson famously claimed that play is a frame rather than an activity. From this perspective we can see that, while toy-play requires always an interpretational activity within this frame (objects are re-semantised and "come to life"), a strategy of toyification evokes this frame without requiring the audience to become players. Playfulness is used as a means of framing objects, systems and entities as something that may be perceived as playful even if it is not meant to be played with.

Some objects are obviously more toyified than others. According to our understanding, the areas of cultural products that are undergoing the strongest toyification developments include art, fashion, technology, mobile industry, education, and lifestyle products. At the same time, it is possible to evidence a

toyification of playthings in general, as for example games (both digital and analogue) are being toyified in terms of their aesthetics and materiality.

Strategies of toyification

There are several ways of conferring a toyish appearance to objects. This can happen, for example, on the level of their visual and tactile dimensions. Aesthetic qualities familiar from toys are employed in their design digitally and physically. The *toyishness* of an object, a structure, an application, a character etc. may be evaluated based on perceptive qualities such as colour-schemes, compactness and plasticity.

Another toyfication strategy is acting on the scale of objects. According to Sutton-Smith (1986, 248), toys are usually, but not always, miniatures. This has, on the one hand, a practical motivation: children and adults can manipulate small objects more easily (Levinovitzm 2017, 274). On the other hand, a change of scale may also entail a change of agency and therefore of interpretation of the object: "the miniaturization of an object entails the acquisition of an agency on the miniature. A reality too large to handle, becomes, suddenly at your fingertips, controllable, observable, touchable." (Thibault, 2017, 103). If designed toys are often miniature versions of real objects, it is not rare that toyified objects are of large format. Creating oversized versions of designed toys, for example, is a common technique in art installations with a strong toyified flavour. For example, the sculptures of contemporary artist Jeff Koons such as Balloon Dog with its various versions, expands the idea of the toy as an object that we can manipulate into a large-scale installation that requires a playful reading, but is not possible (nor meant) to be physically altered. Therefore, rather than thinking of the miniaturization of toys, with toyification, we suggest maximalisation as one of the strategies of toyification that is applied to reach a form of estrangement, what we could call an "Alice in Wonderland" effect.

A systematic typology of toyification strategies is beyond the purpose of this paper, but future works on the subject should also encompass actions such as the *cutification* and *characterization* of non-playful objects.

Conclusion

This paper proposes a framing of the concept of "toyification" within the larger context of ludicisation and from a semiotic perspective. In a ludicised world, the importance of toys as physical objects and signs should not be overlooked: their meaningfulness is exceeding the boundaries of play and invading many aspects of everyday life. We believe that more focus, then, should be given to trace the tendencies of toyification in parallel to recognized phenomena such as gamification, as the world is becoming increasingly toyified and toy-like in many aspects of culture.

In this regard we tried to propose a solid definition of this phenomenon and to situate it in the current cultural landscape. This is meant to be a starting point, a first-hand conceptual statement, from which could originate multidisciplinary researches and analysis on the strategies and effects of toyification.

Aknowledgments

The authors would both like to thank the Brian Sutton-Smith Library and Archives of Play at The Strong National Museum of Play for kindly assisting in finding materials on adult play and toyification during their research fellowships. This study was partly funded by the Academy of Finland research project Centre of Excellence in Game Culture Studies (decision #312396).

References

BATESON, G. (1956): The message 'This is play', in B. Schaffner (ed.) Group processes: Transactions of the second conference, New York, Josiah Macy Jr. Foundation, pp. 145-242.

BARTHES, R. (1957): Mythologiès, Pairs, Seuil.

BLACK D.W. (1982): The Rhetoric of Toys, in Cafagna A.C., Peterson R.T., & Staudenbaur C.A. (eds.) *Philosophy, Children, and the Family. Child Nurturance*, vol 1. Springer, Boston, MA.

BONENFANT M. & GENVO, S. (2014): Une approche située et critique du con-cept de gamification. *Sciences du jeu* 2 https://journals.openedition.org/sdj/286

BRANDT, A. M. & COLTON, M. B. (2008, March): Toys in the classroom: LEGO MindStorms as an educational haptics platform, in *Haptic interfaces for virtual*

- environment and teleoperator systems, 2008. Symposium on haptics 2008. IEEE, pp. 389-395.
- CAILLOIS, R. (1967): Les jeux et les hommes. Paris, Gallimard.
- CRAWFORD, S. (2009): The archaeology of play things: Theorising a toy stage in the 'biography' of objects. *Childhood in the Past*, 2(1), pp. 55-70.
- DETERDING, S. (2016): Make-Believe in Gameful and Playful Design, in *Digital Make-Believe* Springer International Publishing, pp. 101-124.
- DETERDING S., KAHLED R., NACKE L. E. & D. DIXON (2011): "Gamification: Toward a Definition", in CHI 2011, May 712, 2011, Vancouver, BC, Canada.
- ECO, U. (1975): Trattato di semiotica generale, Milano, Bompiani.
- ERIKSON, E. (1977): *Toys and reason. Stages in the ritualization of experience*, New York, W. W. Norton & Company.
- EUROMONITOR (2018): Presentation at PlayCon, San Francisco, May 2018.
- FERRARA, J. (2012): Playful Design: Creating Game Experiences in Everyday Interfaces, in Floridi, L. (2013) *The Ethics of Information*, Oxford University Press.
- FINK, E. (1969 [1957]): Oasi della gioia, Cutolo E. (trans.) Salerno, Rumma.
- FORMAN-BRUNELL, M. & WHITNEY D. (eds.) (2014): Dolls Studies, the many meanings of girl's toys and play, New York, Peter Lang.
- HAMARI, J., KOIVISTO, J., & H. SARSA (2014): "Does gamification work? A literature review of empirical studies on gamification", in 47th Hawaii International Conference on System Sciences, pp. 3025-3034.
- HELJAKKA, K. (2013): *Principle of adult play(fulness) in contemporary toy cultures. From Wow, to Flow, to Glow.* (Doctoral dissertation), Helsinki, Aalto ARTS books
- HELJAKKA, K. (2014): Playing with Words and Toying with Vocabulary: Seizing New Meanings Related to the Things for Play, in 7th ITRA World Congress: Toys as Language and Communication 23-25 July, Braga, Book of Abstracts (Braga: Faculty of Philosophy, Catholic University of Portugal, 2014).
- .HELJAKKA, K. (2015): Toys as Tools for Skill-building and Creativity in Adult Life, Seminar.net. International Journal of Media, Technology and Lifelong Learning (11)2, pp. 134-148. http://seminar.net/images/stories/vol11-issue2/5_Katriina_Heljakka.pdf.
- HELJAKKA, K., & IHAMÄKI, P. (2018): Preschoolers Learning with the Internet of Toys: From Toy-Based Edutainment to Transmedia Literacy, in *Seminar.Net*, 14(1), 85-102. https://journals.hioa.no/index.php/seminar/article/view/2835
- HENRICKS, T. (2017): Foreword. In Sutton-Smith, Brian (2017) *Play for Life. Play Theory and Play as Emotional Survival*. Compiled and edited by Charles Lamar Phillips and the editors of the American Journal of Play, The Strong.

- HUIZINGA, J. (1949 [1938]): *Homo Ludens. A study of the play-element of culture,* London, Routledge & Kegan Paul.
- IDONE CASSONE, V. (2017): Through the Ludic Glass. A cultural Genealogy of Gamification, in *Proceedings of Academic MindTrek* 2017 Conference (Tampere). New York, ACM Press. DOI: 10.1145/3131085.3131120
- IHAMÄKI, P., & HELJAKKA, K. (2018, November): The Internet of Toys, Connectedness and Character-Based Play in Early Education, in *Proceedings of the Future Technologies Conference*, Springer, Cham, pp. 1079-1096.
- KAPP, K. M. (2012): The gamification of learning and instruction: game-based methods and strategies for training and education. Hoboken, John Wiley & Sons.
- LEVINOVITZ, A. (2017): Towards a Theory of Toys and Toy-Play. *Human Studies*, 40(2), 267-284.
- LOTMAN, Y. (1974): "Primary and secondary communication-modelling systems" Materials of the All Union Symposium on Secondary Modelling Systems vol. *1* (5): 224–228.
- LOTMAN, Y. (1980[1978]): "Le bambole nel sistema di cultura", in S. Salvestroni, (ed.) Testo e Contesto. Semiotica dell'Arte e della Cultura. Roma-Bari: Laterza, pp. 145–150.
- LOTMAN, Y. (1990): *Universe of the Mind, a Semiotic Theory of Culture,* London, I.B. Tauris & Co.
- LURKER, E. (1990): "Play Art: Evolution or Trivialization of Art?" *Play & Culture* 3: pp. 146-167.
- MAGALHÃES, L., & Goldstein, J. (eds.). (2018): *Toys and Communication*. Palgrave Macmillan, London.
- MYERS, D. (2018): A Toy Semiotics, Revisited. In *Toys and Communication*. Palgrave Macmillan, London, pp. 47-60.
- MÄYRÄ, F. (2016): Pokémon GO and the Ludification of Culture. Academic keynote, *MindTrek* 2016. Accessed August 31, 2017 Available at: https://www.slideshare.net/fransmayra/pokmon-go-and-the-ludification-of-culture
- NICHOLSON, S. (2012): Strategies for meaningful gamification: Concepts behind transformative play and participatory museums. Presented at *Meaningful Play* 2012. Lansing, Michigan.
 - http://scottnicholson.com/pubs/meaningfulstrategies.pdf
- NICHOLSON, S. (2013): Exploring Gamification Techniques for Classroom Management. Paper presented at Games+Learning+Society 9.0, Madison WI. http://scottnicholson.com/pubs/gamificationtechniquesclassroom.pdf

- NOURI ESFAQHANI N. & CARRINGTON V. (2014): Rescripting, modifying and mediating artifacts, in M. Forman-Brunell and J. Dawn Whitney (eds.) *Dolls Studies, the many meanings of girl's toys and play,* Peter Lang, New York, pp. 121-132
- NOXON, C. (2006): Fisher-Price Fonts. Rejuvenile Consumer Goods: Blog Archive. http://www.rejuvenile.com/blog/c/rejuvenile_consumer_goods/ Last accessed 26/11/2018
- PAAVILAINEN, J. (2018): Personal communication by e-mail. 20. November 2018.
- RAESSENS, J. (2006): Playful Identities or the ludification of culture, in *Games and Culture*, 1, pp. 52-57.
- ROLLINGS, A. & D. MORRIS (2000): Game architecture and design, Scottsdale, Coriolis.
- SALEN, K. (2007): The Ecology of Games: Connecting Youth, Games, and Learning, Cambrige, MIT press.
- SALVADOR, M (2015): In gioco e fuori gioco. Il ludico nella cultura e nei media, Milano, Mimesis.
- SCOTT, A. (2012): Meaningful play, how play is changing the future of our health, IDSA education symposium Boston.
- SICART, M. (2018): Quixotean Play in the Age of Computation. *American Journal of Play*, 10(3).
- SMIRNOVA, E. (release date unknown): *Qualities of toy as a tool for play*. http://www.psytoys.ru/en/qualities-toy-tool-play Last accessed 26/11/2018
- STEINBERG, M. (2012): *Anime's media mix: Franchising toys and characters in Japan*. University of Minnesota Press.
- SUITS, B. (1978): *The Grasshopper. Games, Life and Utopia*, Peterborough, Broadview Press.
- SURACE, B. (2017): Semiotica dei droni, in Francesca Polacci & Anna Maria Lorusso (eds.) *Proceedings of the XLIV AISS Congress*. [APR]
- SUTTON-SMITH, B. (1984) A Toy Semiotics. *Children's Environments Quarterly*, 1(1), Spring 1984.
- SUTTON-SMITH, B. (1986). *Toys as Culture*. Gardner Press, Inc., 19 Union Square West, New York, NY 10003.
- THIBAULT, M. (2016a): Lotman and play: For a theory of playfulness based on semiotics of culture. *Sign Systems Studies* 44(3). pp. 295-325.
- THIBAULT, M. (2017a): The meaning of play. A theory of playfulness, toys and games as cultural semiotic devices (Unpublished doctoral dissertation)
 University of Turin, Turin.

- THIBAULT, M. (2017b): Play as a Modelling System a Semiotic Analysis of the Overreaching Prestige of Games, in *Proceedings of the 1st International GamiFIN Conference*, 105-110.
- VIOLA, F. (2011): *Gamification*. *I videogiochi nella vita quotidiana*, Arduino Viola editore.
- WERBACH K. & D. HUNTER (2012): For the win, How Game Thinking Can Revolutionize Your Business, Philadelphia, Wharton Digital Press.
- WINNICOTT, D. (1971): Playing and Reality, London, Tavistock.
- WITTGENSTEIN L. (1953): *Philosophical Investigations*, E. Anscombe (trans.) New York, Palgrave Macmillan.
- WITTGENSTEIN L. (1958): Preliminary studies for the "Philosophical investigations" generally known as the blue and brown books, Oxford, Blackwell.