

# THE LUDIFICATION OF CULTURE

---

by **Joost Raessens**

## 1 INTRODUCTION

Most of you, including those who do not engage in media studies, are familiar with the subject of this article: the concept of play.<sup>1</sup> Just open your newspaper and see how this concept imposes itself, both in word and image. Take for example the Dutch cabinet formation in 2010: “Formation Rules Out of Date” *de Volkskrant* announces (Voermans 2010). And *NRC Next* points out that the “formation game is not played properly” and that the process shows signs of “rough play” (Peters 2010). Imagery in *de Volkskrant* similarly uses the play metaphor to denote the political situation. Dutch politician Geert Wilders is depicted as a puppeteer pulling the strings at whim while the political arena is reduced to his playground. Rules: no Muslims, no leftist elite and no judges. Closing time – or how long will this cabinet stay in power? – ask Mr Wilders.

---

1 This article is based upon my inaugural lecture, delivered in 2010 and published by Utrecht University in 2012 (Raessens 2012).



Figure 1: Puppeteer Wilders, 2010. <sup>2</sup>

A second example – this time from the field of media studies – is offered by the film *Slumdog Millionaire* (Beaufoy 2008). It is remarkable that this particular film was the big winner at the Academy Awards – the Oscars – in 2009. Suspense in the film largely depends on the format of a major television genre, the game show, and more specifically the quiz show: the Indian version of *Who Wants to Be a Millionaire?* (Big Synergy 2000). At the beginning of the film, we have an opening ritual that introduces protagonist Jamal Malik, which is followed by the actual game, the quiz, while the film ends with a closing ritual showing how the winner Jamal is congratulated by the presenter and handed a check with the amount of money he has won. Media scholar John Fiske calls this format of “ritual-game-ritual” (1987, 265) an enactment of capitalist ideology. The suggestion is made that – regardless of

---

<sup>2</sup> Jos Collignon’s drawings were published in *de Volkskrant*, September 9, 2010 and October 7, 2010. I am grateful to Jos Collignon for providing both drawings. Collignon had foresight; as of April 21, 2012 the government fell because Wilders withdrew his support.

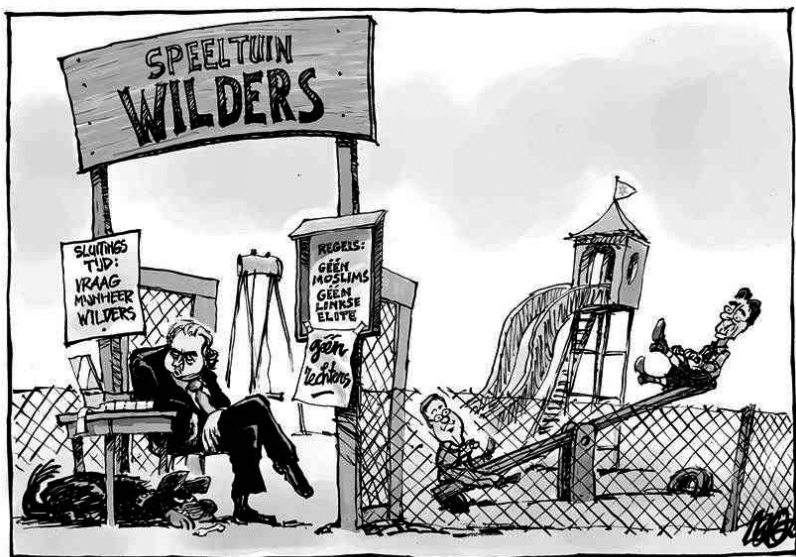


Figure 2: Playground Wilders, 2010.

the differences – everyone would have the same opportunities. That differences in the standard of knowledge are often associated with differences in social backgrounds would thus be hidden from view. This is indeed how the film could be interpreted. The *people in the film* who in increasing numbers follow the show watch in amazement as Jamal correctly answers each new question yet again. But director Danny Boyle plays a double game. Ingeniously he interweaves the storyline of the quiz with the narrative of Jamal's life. By thus addressing Jamal's social background he manages to show the *film's audiences* how this bum from the slums gleaned his superb knowledge from the streets to win the quiz show.<sup>3</sup>

These two examples highlight most of the features of the play concept that I want to discuss in this article: the importance of rules, the idea that rules can be changed, the playful nature of cultural domains such as politics and media, the understanding that play is often less open than it looks (it

---

3 For a fuller analysis of *Slumdog Millionaire*, see Raessens (2009a).

is Mr Wilders's playground), the worldwide popularity of game shows, in other words: the cultural significance of play. To study and understand these features, we need a playful turn in media theory as I will argue in this article.

Since the 1960s, when the word *ludic* became popular to denote playful behaviour and fun objects – think for example of the Dutch counterculture movement Provo and the Situationist International of founding member Guy Debord – playfulness has gradually become a central category of our culture. The popularity of computer games is a striking example in this respect. A lot of people play games, young and old, male and female.<sup>4</sup> The game industry plays an increasingly important role in the Netherlands, as it does in other countries. The city of Utrecht is gradually changing into the gaming capital of Europe, hosting the Festival of Games, the Dutch Game Garden as a boost to the Dutch game industry, and U-GATE, the Utrecht Center for Game Research and Technology.<sup>5</sup> Although computer games draw a lot of attention, they are not the only manifestation of this ludification process. Play is not only characteristic of leisure, but also turns up in those domains that once were considered the opposite of play, such as education (e.g. educational games), politics (playful forms of campaigning, using gaming principles to involve party members in decision-making processes, comedians-turned-politicians)<sup>6</sup> and even warfare (interfaces resembling computer games, the use of drones – unmanned remote-controlled planes – introducing war à la PlayStation). Such playfulness can also be witnessed in the surge of using mobile phones and the playful communication resulting from this – think of texting and twittering. As linguist Andrea Lunsford argues, “writing has become amazingly creative. It is playful and experimental” (Houtekamer 2009, 4).

---

4 See [www.theesa.com](http://www.theesa.com) (accessed May 6, 2014).

5 For an overview of the Dutch gaming ecosystem, see van Grinsven and Raessens (forthcoming). For more information, see these websites: [www.festivalofgames.nl](http://www.festivalofgames.nl), [www.dutchgamegarden.nl](http://www.dutchgamegarden.nl) and [www.u-gate.nl](http://www.u-gate.nl) (all accessed May 6, 2014).

6 The German Pirate Party and Beppe Grillo's 5 Star Movement (*Movimento 5 Stelle*) are two examples. For an analysis of the German Pirate Party, see the German blog Carta ([carta.info](http://carta.info)), in particular the contributions of Bieber (2009) and Lange (2012). For the 5 Star Movement, see Turner (2013).

I have described this development earlier as the “ludification of culture” (Raessens 2006). One specific part of this more general process is referred to by the term *gamification* (Deterding et al. 2011): the integration of game elements in products and services with the aim to advance user involvement.<sup>7</sup> The economist Jeremy Rifkin refers to this development as follows: “Play is becoming as important in the cultural economy as work was in the industrial economy” (Rifkin 2000, 263). And the sociologist Zygmunt Bauman argues that playfulness in our ludic culture is no longer confined to childhood, but has become a lifelong attitude: “*The mark of postmodern adulthood is the willingness to embrace the game whole-heartedly, as children do*” (Bauman 1995, 99).<sup>8</sup>

It’s important to address the question whether the “ludification of culture” refers to, or is meant to be interpreted as, an ontological or an epistemological claim. The claim would be ontological if it would refer to a “new phase of history characterized so much by play that we can deem it a *play world*” (Combs 2000, 20).<sup>9</sup> Or, as Eric Zimmerman and Heather Chaplin claim in their *Manifesto for a Ludic Century*: “the 21st century will be defined by games” (Zimmerman and Chaplin 2013).<sup>10</sup> To me, their claim seems difficult to prove because it is too general a statement. One thing we should do is focus on more specific questions, such as whether today’s cinema is more (or less) playful than it was, say, ten years ago. In this article my claim is on

---

7 We in the Netherlands have known this phenomenon of *gamification* since 1959, when the amusement park De Efteling introduced the figure Holle Bolle Gijs that rewards children for cleaning up their waste. Dutch Supermarket chain Albert Heijn mined the 2012 European football championships to create a “men against women” pool on Facebook. Participants could predict the results of matches. Winners received a discount on AH products. For more examples, see: [www.gamification.org](http://www.gamification.org) (accessed May 6, 2014).

8 Bauman’s emphasis.

9 Combs’ emphasis.

10 Taking Zimmerman and Chaplin’s claim serious that “the ludic century is an era of games”, would mean that also their manifesto should be considered to be a game, or as Dutch theorist Jan Simons puts it in relation to the manifesto of Dogma 95: “as a ‘move’ in the game” of, in the case of Lars von Trier, competing modes of film making (Simons 2007, 25). Such an approach would transform the field of media theories into an agonistic domain within which manifestos (such as *Manifesto for a Ludic Century*) and articles (such as this one) are part of a (theoretical) battle of all against all. My article for this book can be considered to be a counter-move in the game we media theorists play.

the other hand foremost epistemological. I argue that the concept of *play* can be used as a heuristic tool to shed new light on contemporary media culture, as a lens that makes it *possible* to have a look at new objects and study them in a particular way. The concepts of play, and the ludification of culture play a crucial role in what I call the “ludic turn in media theory” (Raessens 2012). Both concepts enable me as a theorist to identify specific aspects of today’s culture, and to construct a specific conceptual perspective on today’s media culture. Zimmerman and Chaplin’s claim is both too broad and too narrow: it is too broad because it has as its focus the twenty-first century, it is too narrow because it starts from a games perspective. My approach is just the opposite, I specifically focus on media (theory) and the ludic or playful turn that is taking place in that specific field.

## 2 THE STUDY OF PLAY

Considering man and his world as playful certainly is no recent phenomenon; it is of all times and all cultures. In 1795 Friedrich Schiller, for example, emphasized the importance of the play instinct for mankind. Well-known is the dictum from his *On the Aesthetic Education of Man*, one of the most important philosophical works of early German romanticism: “Man only plays when he is in the fullest sense of the word a human being, and *he is only fully a human being when he plays*” (Schiller 1967/1795, 107).<sup>11</sup> Schiller expects no salvation from politics; only play, especially the game of art, can be expected to humanise society. Next to reasoning (*homo sapiens*) and crafting (*homo faber*) it is playing (*homo ludens*) that takes up the centre of attention. Philosophers such as Nietzsche, Wittgenstein, Heidegger, Gadamer, Marcuse, Derrida, Deleuze and Guattari – most of whom are considered as precursors or representatives of postmodern thought – follow Schiller in their appreciation for the notion of play.<sup>12</sup> Not only philosophy, however, but also the (natural) sciences, social and behavioural sciences, geosciences

---

11 Schiller’s emphasis.

12 See the special issue “Gaming and Theory” of the journal *symplekē* 17(1-2) from 2009. The issue contains contributions that “engage the various intersections of the idea and practice of digital gaming and critical theory” (page 5). The work of Gilles Deleuze and Felix Guattari is particularly alluded to.

and the full width of the humanities have in recent years testified to an every growing interest in the notion of play.

Strikingly, the conceptual framework of play used to meet with little systematic research in media studies. Four developments at the end of the last century changed this, however: socio-cultural changes, changes in the media themselves, changes in media studies, and institutional changes in education and research. The first change made it *possible* to envisage research into the concept of play, the second made it *desirable*, and with the third and fourth it became a matter of *reality*.

Let us start with the socio-cultural changes. In his article “Play and (Post)Modern Culture” Lourens Minnema (1998) offers an interesting explanation for the growing interest in play in nineteenth- and twentieth-century culture. Minnema points to the fact that, since modernity, Western culture has come to consist of many sub-domains – such as politics, economics, law, education, science, technology, and art – each possessing relative autonomy and a specific set of rules. We see our contemporary (post)modern culture “as a game without an overall aim, as play without a transcendent destination but not without the practical necessity of rules agreed upon and of (inter)subjective imagination; as a complex of games each one having its own framework, its own rules, risks, chances, and charms” (ibid., 21). It is this type of social-cultural change that made it possible to envisage research into the conceptual framework of play.

Second, we are witnessing changes in the media themselves, for example in the areas of film, TV, and new media. Since the 1990s, a new type of playful film narrative has enjoyed great popularity. Play is central to so-called puzzle films (Buckland 2009) such as *Lost Highway* (Lynch and Gifford 1997), *Run Lola Run* (Tykwer 1998) and *Memento* (Nolan 2000). The films feature plots of such intricacy that viewers feel they are solving a puzzle.<sup>13</sup> New developments in the field of TV such as the online video sharing website YouTube enable users to “play” or mimic television, and to look like a professional (Feely 2006). Not only do YouTube users play the

---

13 In their analysis of contemporary film, Simons (2007) as well as Leschke and Venus (2007) similarly employ the concept of play. Also see “Playing Games With Story Time” in Bordwell and Thompson (2008) and Juul (2008).

television game, but conversely the broadcasting companies play the YouTube game by launching websites such as Uitzending Gemist<sup>14</sup>, an internet protocol based replay service which enables viewers to watch shows they have missed on television. As I will argue below, mimicry is an important feature of play. Another example of what could be called the gamification of television is offered by second screen applications and apps such as the Heineken Star Player app, which enables viewers of Champions League matches to gamble on the outcome of an attack on Facebook. New media appear to exemplify this process of ludification: think of both commercial and serious computer games, playful communication via mobile phones, or social media like Facebook where identities are constructed in a playful way. Creating and maintaining communities form the core of these sites, which offer users the possibility to playfully express who they think they are and, more importantly, how they can be seen as more attractive in the eyes of fellow users. Following the view that it is the rules that constitute game worlds, one could conclude that this process of ludic identity construction can only take place within the formats developed and controlled by Facebook: a kind of multiple-choice test with a limited number of possible responses, little free play or improvisation (*paidia*), despite the suggestion of otherwise, and, on closer inspection, a lot of rule-governed discipline (*ludus*).<sup>15</sup> All in all, these changes in media – in film, television, as well as new media – made it *desirable* to investigate the conceptual framework of play.

Third, as I suggested above, play until recently occupied only a modest position in media studies. This is changing, however, which has to do with the alterations in the way game and media studies relate to one another. That relation has three forms, which for the major part can be situated historically in terms of three stages. At its incipience, game studies emphatically sought a position outside media studies, clearly searching for an identity of

---

14 See [www.uitzendinggemist.nl](http://www.uitzendinggemist.nl) (accessed May 6, 2014).

15 The terms and *paidia* and *ludus* are further explained below. The idea that Facebook as a sort of Big Brother closely monitors our purchasing behaviour (data mining) so as to enable advertisers to target users specifically is perhaps balanced by the fact that the very formats Facebook uses enable user groups to lie more convincingly about the selves they present, making it harder to figure out what individual users really, actually like. This might be the paradox of Facebook.



its own. Any overtures from the part of film or literary studies were seen as an attempt to colonise this new domain. In 2001, Espen Aarseth in his editorial for the new online magazine *Game Studies* stated that computer games had an aesthetics of their own and could not be reduced to a type of film or literature, and that the “colonising attempts” of both film and literature studies at absorbing computer games would continue until game studies have established itself as an independent academic field (Aarseth 2001). And for its part, media studies merely tolerated the newcomer. In the second stage, game studies and media studies opened up to one another. Within the Digital Game Research Association (DiGRA), for example, the special interest group Digital Games and Film was set up, creating a platform where game and film scholars could collaborate.<sup>16</sup> Leading publications such as *Screen-Play: Cinema/Videogames/Interfaces* (King and Krzywinska 2002) would have been unthinkable or merely marginal only a few years before: in this book the authors explore the ways in which film and computer games are related to one another. The third stage is the one we are in now and also the one that particularly is of interest to me here. Not only is game studies gradually becoming an integral part of media studies, but play is also increasingly seen “as a tool for the analysis of the media experience” (Silverstone 1999, 59). Play is increasingly regarded as a central notion for understanding media culture (Neitzel and Nohr 2006; Thimm 2010).<sup>17</sup> In this third stage, research into the conceptual framework of play has become a matter of *reality*.

Fourth, this is also reflected in the institutional changes in education and research. New disciplines, such as new media studies and computer game studies, are being established in art and media departments (academic as well as vocational education), which invest a lot of their research and teaching into the theory of play. Take for example the activities going on within the GAP Center for the Study of Digital Games and Play, which is

---

16 See [www.digra.org](http://www.digra.org) (accessed May 6, 2014). In 2003 Utrecht University hosted “Level Up”, the first DiGRA conference (Copier and Raessens 2003).

17 In recent issues of *ToDiGRA* (Physical and Digital in Games and Play), *G.A.M.E.* (Reframing Video Games in the Light of Cinema), and *Media Fields* (Playgrounds), we see this focus on the concept of play: researchers refer to “playful media”, they want to answer the question “what is ludic at the cinema” and study what they call “mediated play spaces”.

affiliated with Utrecht University.<sup>18</sup> And also knowledge institutions such as the Netherlands Organisation for Scientific Research NWO, the independent research organisation TNO, the Royal Netherlands Academy of Arts and Sciences KNAW, and the Netherlands Study Centre for Technology Trends STT are involved in either researching play or facilitating such research. Game studies thus have gradually become an integral part of the Dutch academic community.<sup>19</sup>

To sum up then, changes in culture and society, in media, in the relation between game studies and media studies, as well as in the educational and knowledge institutions have each in turn made it *possible* to envisage research into the conceptual framework of play, have made such research *desirable*, and have made it become a matter of *reality*.

### 3 PLAY

Having situated the state of affairs regarding research into the conceptual framework of play, there are three remaining questions to address: what is play, which forms does play take up in contemporary media culture, and what do I mean to say when I refer to the ludic, playful turn in media theory? Let us begin with the concept of play.

To capture this concept, I want to focus on one of the most important books in the current debate about play: Johan Huizinga's *Homo Ludens*. This book was first published in 1938 and since then has been translated into many languages. It is considered the most influential modernist exposition of play and continues to remain – mind you, more than seven and a half decades after the first edition – the inevitable reference point for any “serious” discussion of play. Undeniably, the book's on-going impact has to do with

---

18 See [www.gamesandplay.nl](http://www.gamesandplay.nl) (accessed May 6, 2014).

19 See for example three studies investigating so-called serious games: the TNO report *Serious Gaming* (van Kranenburg et al. 2006), and the explorative reports *Serious gaming: Vergezichten op de Mogelijkheden* (van Uden 2011) and *Play On: Serious Gaming for Future Seniors* (Bakkes et al. 2012), a study on healthy ageing, by the Netherlands Study Centre for Technology Trends STT. The impact of playful media on the construction of identities was central to the NWO-funded research project *Playful Identities* (2005–2010, led by Valerie Frissen, Jos de Mul and Joost Raessens). This article builds on the results of this project. Also see note 21.

its large ambition and scope. As the subtitle “A Study of the Play-Element of Culture” makes clear, it was Huizinga’s ambition to demonstrate that the rise and evolution of culture occurs in and as play.<sup>20</sup> In the first chapter Huizinga offers a definition of the phenomenon of play, which has since been quoted in almost any book on play. Play is:

[. . .] a free activity standing quite consciously outside “ordinary life” as being “not meant”, but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner. It promotes the formation of social groupings. (Huizinga 1955/1938, 13)

Let us examine the six elements of this definition. Play first of all expresses the freedom of humanity, because as a free act it is disinterested and has no practical utility. For Huizinga, play belongs to symbolic culture, which he refers to as “holy earnest” (ibid., 23) and which in his view contrasts with ordinary life, the realm of what we as fragile beings need to survive: food, clothing, housing, etc. We could call the latter instances of “profane earnest” in line with Huizinga’s reasoning; play is not meant and refers to an activity of make belief or “pretence” (ibid., 47). In play, you know that the game you play belongs to a different category from ordinary life; you can be immersed in play, be completely lost in it, experience excitement and joy; play is characterised by specific boundaries in space and time and the game you play can always be repeated; crucial to play are the rules that constitute the world of the game, which are absolutely binding and indisputable; finally, play creates order in an imperfect world and a confused life. Play is essential for community engagement.

---

20 Part of the confusion in the reception of *Homo Ludens* is due to unfortunate translations. For example, the subtitle of the English translation (Boston: Beacon Press, 1955) - reads “A Study of the Play Element *in* Culture” (own emphasis), which obviously is a substantial mistranslation of the Dutch subtitle: “Proeve eener Bepaling van het Spel-Element *der* Cultuur” (own emphasis). In Huizinga’s definition of play, the Dutch “niet gemeend” is also wrongly translated as “not serious”, it should have been: “not meant”.

Huizinga's definition of play has met with three major types of critique. First, his definition would be universalist and essentialist in the sense that it claims to cover the immense variety in games and play. This could be countered however by understanding the six elements I have distinguished in Huizinga's definition as a set of criteria that together constitute a family resemblance in the Wittgensteinian sense. An activity belongs to the family of play when it meets at least some of these characteristics, the number of which then determines the degree of "playfulness" of that activity.

The second type of critique asserts that Huizinga discusses play merely in general terms. Roger Caillois (2001 / 1958) proposes to further develop Huizinga's play concept by distinguishing four different categories of play: (1) *mimicry* (make believe or pretence), which ranges from the imitation games of children or the above-mentioned "playing television" on YouTube to the plays staged in the theatre; (2) *agôn* (competitive games), which covers competitive sports like football or the quiz show; (3) *alea* (games with a luck factor) referring to games like the lottery; and (4) *ilinx* (games in which vertigo is central), which includes entertainments like bungee jumping or the rollercoaster. Besides these four categories Caillois distinguishes the poles *paidia* and *ludus*, with in each of the four categories the specific types of games taking up a relative position between these poles: *Paidia* refers to free play, improvisation, spontaneity and impulsiveness, while *ludus* enriches *paidia* by adding forms of discipline and refers to more explicit forms of rule-driven games.

While the first two points of critique can be read in supplement to Huizinga, the third is more fundamental. By defining play as he does, Huizinga upholds a distinction between play and non-play that is far too strict. This entails that playful activities share at least some of the characteristics which I outlined above; while non-play is exclusively situated in the opposite domain of reality, utility, coercion, seriousness, etc. As a consequence Huizinga fails to do justice to the ambiguity of play that according to play theorists such as Brian Sutton-Smith (1997) is precisely its defining characteristic. Huizinga's strict distinction can be understood in terms of his adherence to modernist dichotomies, which is why I explicitly referred to his *Homo Ludens* concept as the most important "modernist" exposition of play. For modernist thought, including that of Huizinga, leaves no room for ambiguities and seeks to dispel them. As a result, however, Huizinga becomes

entangled in insoluble conceptual tensions. He denotes play as reality at one moment, but as appearance at another; it constitutes a core dimension of human life (reality), yet stands outside it (appearance) because of its make believe element; play is freedom and then again it is another form of coercion; play celebrates human freedom, but the player can be completely lost in his game; the rules of the game are absolutely binding, but players can also bend the rules; games lack utility yet are useful; play is a purposeless interlude, yet it also creates order and community, and so on.

**Culture arises and unfolds  
in and as play.**

The solution is to do justice to these ambiguities, because they are so typical for play. The player for example is both part of the ordinary world and immersed in the world of the game: this is where the ludic experience matches the aesthetic experience. When we play we plunge enthusiastically into the world of the game, while at the same time we maintain a certain distance in relation to our own behaviour in play; this is why we can call that behaviour playful. This duality allows us to maintain less or more critical distance with respect to the rules; it allows us to see those rules as just the rules of the game, which are always open to adaptation. Taken together, Huizinga's ideas about play along with the three amendments discussed here form a good starting point for the analysis of the ludification of contemporary media culture, as we shall see in the next section.

A final remark on *Homo Ludens*. Although Huizinga argues that all culture arises and evolves in and as play, he also claims that not every culture continue to play. According to Huizinga, the Romantic period was the last in our culture to exhibit a playful spirit. In the nineteenth century the play factor much recedes into the background. And in the dark final chapter – on the play element of the twentieth century – Huizinga proposes that the element of play has largely lost its meaning. There is hardly any play in modern culture. A major reason for the demise of play, he argues, is the rise of technology. Here I would defend the thesis – stepping up in time – that, from an ontological perspective, digital information and communication technologies have precisely enabled new forms of play.

The first of the three questions – what is play? – has now been answered. The remaining two – which forms do play take up in contemporary media culture, and what do I mean to say when I refer to the ludic, playful turn in

media theory? – will be addressed presently. Let us begin with tracing play in contemporary media culture.

#### 4 PLAYFUL MEDIA CULTURE

In our contemporary media culture, digital technologies and play are closely linked. In order to better understand the impact this has, we need to further specify the concept of play. It is important to emphasise the distinction between *play* and *game*. How do the two concepts relate to each other? *Play* is the overarching category. It refers to all activities of play, including both games and non-game activities such as playful communication. *Games* are the formalised parts of *play* (cf. Salen and Zimmerman 2004, 301–311). This distinction allows us to focus our attention not only on computer games, but also on the impact of play on media culture as such.

Huizinga's concept of play – to which I confine myself in this article – seems like a good starting point for the analysis of our media experience, because our experiences in media and play have a great deal of ambiguities and characteristics in common. Or, to put it differently, the media – each in their own medium-specific way – offer users new possibilities – “affordances” – to play. Let us briefly consider the six elements of the play concept distinguished above, taking into account the associated ambiguities.<sup>21</sup> This discussion makes clear that the process of ludification is not necessarily a positive development: freedom goes hand in hand with coercion, fun with annoyance.

To start with the first element, media use may initially look like harmless, disinterested fun. Think of all the creative adaptations of *Star Wars* (Lucas 1977) on YouTube. It can also, however, become involved in political ends. Think of the Turkish court blocking access to YouTube because it allegedly hosted videos that attacked Atatürk, the founder of the Republic of Turkey; the element of make believe refers to the dual nature of media. Like play, our media culture consists of accepting the “as-if-ness of the world” (Silverstone 1999, 59). According to the philosopher Gianni Vattimo, it is

---

21 For a detailed analysis of the playfulness of digital media, see Cermak-Sassenrath (2010) and the book resulting from the Playful Identities project: Frissen et al. (forthcoming). Also see note 19.

becoming increasingly difficult to imagine a single reality, due to the current proliferation of digital media. He therefore reasons that if media cause us to lose our “sense of reality”, this is a liberation rather than a great loss (Vattimo 1992, 8). In line with this, he argues that media realities are just versions of how the world works, subject to the “game of interpretations” (Vattimo 1998, 19). The impact of this debate – is it possible that media show us an objective reality, or do they merely offer versions of this reality – can be witnessed when considering the current reorganisation of news shows within the Dutch public broadcasting system: some shows are assigned the role of broadcasting news from a specific angle or perspective, whereas others such as *Nieuwsuur* should maintain strict objectivity.

Considering the other elements, it is worth pointing out that digital media offer forms of pleasure and annoyance resulting from the interactive aspect: there is frustration when the computer does not perform what you want it to do and pleasure involved in surrendering to the rules or conversely opposing them; the specific boundaries of space and time appear to be under heavy pressure when considering the culture of constant accessibility that arose with mobile phone usage. Yet, the boundaries become clear when we focus on the aspect of safety. On social media like Facebook, users can playfully construct identities that do not necessarily have any implications for real life; the element of order and community engagement returns in the formation of web-based social groups: green blogs like *sustainablog*<sup>22</sup> unite users who are committed to a better environment and oppose the existing social order.

As for the rules of the game, I would like to discuss this sixth element of play a bit more in depth. Rules can be either accepted or transformed or bent, both at an individual level and at the media system’s macro level. In order to achieve a better understanding of the way we can deal with rules, we must consider the interaction between, on the one hand, levels of playability enabled by different media (Kücklich 2004) and, on the other hand, individual users’ ludoliteracy or play competence (Zagal 2010). With respect to television, the aforementioned John Fiske addresses the playfulness that arises from the relationship between a medium and its user. Fiske makes a

---

22 See [sustainablog.org](http://sustainablog.org) (accessed May 6, 2014).

distinction between two types of play. First, a text (e.g. a movie) “has ‘play’ in it, like a door whose hinges are loose” (Fiske 1987, 230). Play here is “free movement within a more rigid structure” (Salen and Zimmerman 2004, 304). Second, such “play” enables viewers to play with the text, i.e. playfully develop an interpretation of their own. Think of the film I mentioned at the beginning of this article, *Slumdog Millionaire*. Is it a form of poverty porn (exploitation of poverty) or a critical reflection on Jamal’s social background? What is distinct about new media is that they enable multiple forms of participation and thus playability, and that they therefore are not limited to the game of interpretations (Raessens 2005).

Playability can have four different levels. First, there is the player who accepts that “the rules of a game are absolutely binding and allow no doubt” (Huizinga 1955/1938, 11). Such a player voluntarily submits himself to the rules that govern the world of the game. The cheater who “pretends to be playing the game” (ibid.) operates on the second level. This player – for example the one who uses cheat codes in computer games – is aware of the explicit and implicit rules of the game and tries to deploy them (against the rules) to his own gain. At the third level we have the spoilsport, “the player who trespasses against the rules or ignores them” (ibid.). An example is the so-called *modder*, the player who modifies the computer game if the system allows for it. The fourth and final level is that of “the *outlaw*, the revolutionary” (ibid., 12) who in digital culture takes the shape of the programmer. Where the player (level 1), the cheater (level 2) and the spoilsport (level 3) still operate within the boundaries of the game or oppose these, the programmer (level 4) creates “a new community with rules of its own” (ibid., 12), his own game world, in other words, thus driving a system’s playability over the edge to discover new forms (Rushkoff 2010 and 2012).<sup>23</sup>

I will offer three examples to show that such an approach to play can be fruitful for the analysis of contemporary media culture. The first example concerns the study of serious games, the second example expands on this,

---

23 The fact remains that programmers are bound by certain codes and protocols, which by definition preclude absolute freedom. This is an important theme in critical software studies. See Galloway (2004 and 2006). The rules of ludo-capitalism provide additional limitations (Dibbell 2006 and 2008).



approaching digital media and digital media experience as something playful, and the third addresses the debate surrounding the concept of media literacy.

Serious games are computer games, which are not only played for entertainment but also for educational purposes. These games are often designed as ideological spaces, as worlds that aim to convince players of certain ideas. Think for instance of *Food Force* (2005) developed by the United Nations' World Food Programme which sets out to convince players that humanitarian aid, possibly involving military intervention – preferably by the UN – is of great importance to solve conflicts worldwide. At first sight a purely noble cause. But closer inspection yields that such games are built on the metaphor of the West as the helping parent, on the premise that emergencies, conflicts, or local wars, all originate from within while the conflict can only be defined or solved by external forces. From this perspective, these games are not really that much different from commercial war games like *Call of Duty* (2003) or *Medal of Honor* (1999) which are based on a similar analysis of the nature of conflicts, suggesting that their solution is possible only through external military intervention. In other words, serious games that appeal to our sympathy are by no means innocent, because they shape the paradigms of guilt and responsibility in a very particular way. This raises the ethical-political question of what game developers, game researchers, and game players should do. Trying to make games more effective by allowing players to become completely immersed in the game world is an option, although allowing for a measure of critical distance in the design of the game is quite recommendable, as I have argued elsewhere using the term *gaming apparatus*. If that condition is met, serious games incorporate “a moment of disavowal – of distancing . . . We [i.e. players] perform actions in the full knowledge that we are doing this within the constraints set by someone else” (Raessens 2009b, 26). This distinction between immersion and critical distance – which I previously described as a *game ambiguity* – is based on the above-mentioned forms of playability. Within such serious games, players will normally subject themselves to the prevailing ideological lines of the game world, while from an ethical-political perspective the awareness of (and where necessary resistance against) these rules is important. This is where the programmer involved in the creation of activist computer games – such as independently

produced “critical computer games” or “games of multitude”<sup>24</sup> – attempts to do something different (Flanagan 2009; Dyer-Witheford and De Peuter 2009).

The second example concerns the playability of digital media in general. At first glance, it seems that these media increase users’ room for play. That is, all software-based products can be modified and adapted to users’ personal needs (level 3 of playability). Think of the hacking and further development of Sony’s robot dog Aibo. When Sony launched this dog in 1999, users soon wanted it to have more functionalities. One of them, hacker Aibopet, designed a program to make the dog dance and made it available on his own website. As media scholar Mirko Schäfer shows, Sony initially did not appreciate these forms of “play beyond the manual” (Schäfer 2006) and threatened with lawsuits, but soon changed track. Sony realised that these hacks could also be integrated into new versions of Aibo. Such playful forms of product modification are characteristic of the major changes taking place in contemporary cultural industries. This example demonstrates – note: within certain limits – the disintegration of the traditional distinction between consumer and producer. In today’s “bastard culture” (Schäfer 2011), media users can become active participants in the process of the creation and evolution of media products. On the other hand, present-day Web 2.0-optimism suggests that we – the consumers – are the ones who are in power. This optimism “urgently begs for deconstruction” (van Dijck and Nieborg 2009, 855). For example, *Time Magazine* elected as person of the year 2007: “You. Yes you. You control the information age. Welcome to your world”. Yet research into the online game World of Warcraft (2004) shows for example that although negotiations take place between players and Blizzard Entertainment, the game company (game scholar René Glas calls these negotiations very appropriately “a battlefield”, 2013), the extent to which players can claim room for play to do their own thing is mainly determined by Blizzard. Here too, the principle remains unaltered that one should buy the game, pay monthly

---

24 Think of more casual games like McDonald’s Video Game (2006) by the collective of media activists Mollindustria ([www.molleindustria.org](http://www.molleindustria.org), accessed May 6, 2014) and September 12th: A Toy World (2003) and MADRID (2004) by [newsgaming.com](http://newsgaming.com) (accessed May 6, 2014). On the basis of Jesper Juul’s notion of casual games (2010) new media scholar Alex Gekker labels such forms of playful activism as “casual politicking” (2012).

subscription fees, and thus remain part of a system that you could designate as ludo-capitalism.

The third example concerns media literacy. How to behave in this media culture, which appears to be characterised on the one hand by autonomy and emancipation and on the other hand by being determined by media (technology)? The ability to be immersed in, yet at the same time maintain critical distance to media, as well as the ability to address the arbitrary nature and mutability of rules (two of the aforementioned ambiguities), are components of what I would call ludoliteracy or play competence, which is in fact a specific form of what is called media literacy (Zagal 2010). Where media literacy in general terms is defined as “*the totality of knowledge, skills, and attitudes needed to operate as critically aware and active citizens in a complex, changing and fundamentally mediated world*” (Raad voor Cultuur [the Dutch Arts Council] 2005, 2),<sup>25</sup> the distinction between game and play and between different forms of playability facilitate a more precise definition of civic participation. Game competence or “gaming literacy” (Zimmerman 2009) relates in particular to playing computer games and involves skills and knowledge related to using games, critically interpret them and design and produce them. Ludoliteracy, however, is applicable across the full spectrum of media. It involves playing by the rules, bending and adjusting the rules in order to move easily through the system, or where necessary and possible, adjusting the system or playing the system. Or as French philosopher Gilles Deleuze once put it: trace and where necessary create lines of flight, allow for leaks in the system (Rabinow and Gandal 1986). Considered as such, the term play is not only suitable for characterising our contemporary media culture (playful) but also for defining the knowledge and skills (ludoliteracy or play competence) required to function in media culture.

## **5 THE PLAYFUL TURN IN MEDIA THEORY**

This leaves us with the question whether we could speak of a ludic turn in media theory. Let us put things in perspective. In recent years the claims of yet another turn followed each other in rapid succession. We already had the linguistic turn, and then supposedly a digital turn, a material turn, a visual

---

25 Emphasis by Raad voor Cultuur.

turn, a pictorial turn, an experiential turn, a spatial turn, a cultural turn, a mediamatic turn, and so on. Is this a clear case of concept inflation, or are these changes really all taking place? Speaking in terms of turns could also stem from the all too human tendency to overestimate the significance of their own times, perhaps even from the irresistible need of researchers delivering articles to accentuate the significance of their own research.

Considering the above, I do indeed claim we are witnessing a ludic turn and that this turn in the field of media studies combines two elements. On the one hand, the notion that media are playful opens up new objects of study: computer games (including serious games), playful aspects of media use (such as product modifications), and the competence to deal playfully with the systems you are part of (ludoliteracy). On the other hand, there is a ludic turn in media theory itself, a turn to which this article hopes to contribute. This allows for considering these media objects in a particular way. A new interpretative framework arises from using new concepts and conceptual dichotomies from game and play studies, a specific focus to deploy in the theoretical study of media and their use. Think of concepts such as playability, gaming apparatus, play competence or ludoliteracy, battlefields of negotiation, and casual games-casual politicking, and of conceptual dichotomies or ambiguities such as: rules (constitutive, limiting, closure) and variability thereof (openness, freedom); immersion (surrender) and critical distance (monitoring); disinterestedness versus social criticism; depicting reality or only versions thereof; the pleasure of being either in control or not. I believe that these concepts and conceptual dichotomies are useful in bringing to light the important characteristics of and issues in the field of digital media culture and to prepare the ground for new perspectives and action plans. Think for example of the power game fought between producers, distributors, and consumers, with the industry trying to set the rules of the game while certain user groups aim to maintain a degree of openness by transforming these rules.

Three perspectives should be united in this: the political analysis of media, paying attention to the struggle for power between producers and consumers and the impact of ludo-capitalism; the analysis of the “digital material” aspects of media such as they are studied in critical code studies and software studies (van den Boomen et al. 2009), and the philosophical analysis of play and media, the lines of flight and leaks in the system. The ludic turn in media theory

expounded here seems very fruitful, as I hoped to have shown in this article. Now I do not just want to study the ludic turn but actually bring it about, as an example of what Henry Jenkins once called “intervention analysis” (Tulloch and Jenkins 1995, 238). Intervention analysis is not just interested in describing and explaining the existing orders of knowledge, but wishes to change these. For this we at Utrecht University are busy with bringing together our research and teaching activities in this area to set up a collaborative community of researchers and students (from inside and outside our university). We christened this community as the Center for the Study of Digital Games and Play, abbreviated GAP. If we do our work well, you will soon associate GAP no longer with what Huizinga would call the “profane earnest” of GAP clothing, but with the “holy earnest” of games and play.

## BIBLIOGRAPHY

- AARSETH, ESPEN. 2001. “Computer Game Studies, Year One.” *Game Studies* 1(1). [www.gamestudies.org/0101/editorial.html](http://www.gamestudies.org/0101/editorial.html).
- BAKKES, SANDER, ELLIS BARTHOLOMEUS, THOMAS GEIJTENBEEK, JACCO VAN UDEN, SABINE WILDEVUUR. 2012. *Play On. Serious Gaming for Future Seniors*. Den Haag: Stichting Toekomstbeeld der Techniek.
- BAUMAN, ZYGMUNT. 1995. *Life in Fragments. Essays in Postmodern Morality*. Oxford: Blackwell.
- BEAUFOY, SIMON. 2008. *Slumdog Millionaire*. Directed by Danny Boyle. Paris: Pathé.
- BIEBER, CHRISTOPH. 2009. „Kampagne als ‚Augmented Reality Game‘: Der Mitmachwahlkampf der Piratenpartei.“ *Carta*, September 25. [www.cartainfo/15450](http://www.cartainfo/15450).
- BIG SYNERGY. 2010-2014. *Kaun Banega Crorepati*. Culver City: Sony Pictures Television International.
- BORDWELL, DAVID AND KRISTIN THOMPSON. 2008. *Film Art: An Introduction*. Boston: McGraw-Hill.
- BUCKLAND, WARREN. 2009. *Puzzle Films. Complex Storytelling in Contemporary Cinema*. Oxford: Wiley-Blackwell.
- CAILLOIS, ROGER. 2001 / 1958. *Man, Play and Games*. Chicago: University of Illinois Press.
- CERMAK-SASSENATH, DANIEL. 2010. *Interaktivität als Spiel. Neue Perspektiven auf den Alltag mit dem Computer*. Bielefeld: transcript.
- COMBS, JAMES E. 2000. *Play World. The Emergence of the New Ludenic Age*. Westport: Praeger Publishers.
- COPIER, MARINKA AND JOOST RAESSENS. 2003. *Level Up. Digital Games Research Conference*. Utrecht: Universiteit Utrecht.

- DETERDING, SEBASTIAN, DAN DIXON, RILLA KHALED AND LENNART NACKE. 2011. "From Game Design Elements to Gamefulness: Defining Gamification." In *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments*, 9–15. New York: ACM.
- DIBBELL, JULIAN. 2008. "The Chinese Game Room. Play, Productivity, and Computing at Their Limits." *Artifact* 2(3): 1–6.
- DIBBELL, JULIAN. 2006. *Play Money. Or, How I Quit My Day Job and Made Millions Trading Virtual Loot*. New York: Basic Books.
- DYER-WITHEFORD, NICK AND GREIG DE PEUTER. 2009. *Games of Empire. Global Capitalism and Video Games*. Minneapolis: University of Minnesota Press.
- FEELY, JIM. 2006. "Lights! Camera! Vodcast! How to Make Your Own Viral Hit." *Wired*, May 14. [www.wired.com/wired/archive/14.05/howto.html](http://www.wired.com/wired/archive/14.05/howto.html).
- FISKE, JOHN. 1987. *Television Culture*. London: Routledge.
- FLANAGAN, MARY. 2009. *Critical Play. Radical Game Design*. Cambridge, MA: The MIT Press.
- FRISSEN, VALERIE, SYBILLE LAMMES, MICHEL DE LANGE, JOS DE MUL AND JOOST RAESSENS. *Forthcoming. Playful Identities: The Ludification of Digital Media Cultures*. Amsterdam: Amsterdam University Press.
- GALLOWAY, ALEXANDER R. 2006. *Gaming. Essays on Algorithmic Culture*. Minneapolis: University of Minnesota Press.
- GALLOWAY, ALEXANDER R. 2004. *Protocol. How Control Exists After Decentralization*. Cambridge, MA: The MIT Press.
- GEKKER, ALEX. 2012. *Gamocracy: Political Communication in the Age of Play*. MA-thes., Utrecht University.
- GLAS, RENÉ. 2013. *Battlefields of Negotiation. Control, Agency, and Ownership in World of Warcraft*. Amsterdam: Amsterdam University Press.
- HOUTEKAMER, CAROLA. 2009. "Taal is Speelser Geworden." *NRC Next*, September 28.
- HUIZINGA, JOHAN. 1955/1938. *Homo Ludens. A Study of the Play-Element in Culture*. Boston: The Beacon Press.
- JUUL, JESPER. 2010. *A Casual Revolution: Reinventing Video Games and Their Players*. Cambridge, MA: The MIT Press.
- JUUL, JESPER. 2008. "The Magic Circle and the Puzzle Piece." Accessed April 1, 2014. [http://opus.kobv.de/ubp/frontdoor.php?source\\_opus=2455&la=de](http://opus.kobv.de/ubp/frontdoor.php?source_opus=2455&la=de).
- KING, GEOFF AND TANYA KRZYWINSKA. 2002. *ScreenPlay. Cinema/Videogames/Interfaces*. London: Wallflower Press.
- KÜCKLICH, JULIAN. 2004. "Play and Playability as Key Concepts in New Media Studies." Accessed April 1, 2014. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.94.4169&rep=rep1&type=pdf>.
- LANGE, ANDREAS. 2012. "LiquidFeedback: Gamification der Politik?" *Carta*, March 14. <http://www.carta.info/42081/>.
- LESCHKE, RAINER AND JOCHEN VENUS. 2007. *Spielformen im Spielfilm. Zur Medienmorphologie des Kinos nach der Postmoderne*. Bielefeld: transcript.
- LUCAS, GEORGE. 1977. *Star Wars*. Directed by George Lucas. Los Angeles: 20th Century Fox.
- LYNCH, DAVID AND GIFFORD, BARRY. 1997. *Lost Highway*. Directed by David Lynch. London: October Films.
- MINNEMA, LOURENS. 1998. "Play and (Post)Modern Culture. An Essay on Changes in the Scientific Interest in the Phenomenon of Play." *Cultural Dynamics*, 10(1): 21–47.
- NEITZEL, BRITTA AND ROLF F. NOHR. 2006. *Das Spiel mit dem Medium. Partizipation – Immersion – Interaktion*. Marburg: Schüren Verlag.

- NOLAN, CHRISTOPHER. 2000. *Memento*. Directed by Christopher Nolan. Universal City: Summit Entertainment.
- PETERS, JIT. 2010. "Formatiespel Wordt Niet Zo Netjes Gespeeld." *NRC Next*, September 10.
- Raad voor Cultuur. 2005. *Mediawijsheid. De Ontwikkeling van Nieuw Burgerschap*. Den Haag: Raad voor Cultuur.
- RABINOW, PAUL AND KEITH GANDAL. 1986. "The Intellectual and Politics (an Interview with Gilles Deleuze)." *History of the Present* 2(1-2): 20-21.
- RAESSENS, JOOST. 2012. *Homo Ludens 2.0. The Ludic Turn in Media Theory*. Utrecht: Utrecht University.
- RAESSENS, JOOST. 2009a. "Homo ludens 2.0." *Metropolis M* 5 (October/November): 64-69, 85-88.
- RAESSENS, JOOST. 2009b. "Serious Games From an Apparatus Perspective." In *Digital Material. Tracing New Media in Everyday Life and Technology*, edited by Marianne van den Boomen, Sybille Lammes, Ann-Sophie Lehmann, Joost Raessens and Mirko Tobias Schäfer, 21-34. Amsterdam: Amsterdam University Press.
- RAESSENS, JOOST. 2006. "Playful Identities, or the Ludification of Culture." *Games and Culture* 1(1): 52-57.
- RAESSENS, JOOST. 2005. "Computer Games as Participatory Media Culture." In *Handbook of Computer Game Studies*, edited by Joost Raessens and Jeffrey Goldstein, 373-388. Cambridge, MA: The MIT Press.
- RIFKIN, JEREMY. 2000. *The Age of Access. The New Culture of Hypercapitalism, Where All of Life Is a Paid-for Experience*. New York: Jeremy P. Tarcher/Putnam.
- RUSHKOFF, DOUGLAS. 2012. "Monopoly Moneys. The Media Environment of Corporatism and the Player's Way Out." PhD diss., Utrecht University.
- RUSHKOFF, DOUGLAS. 2010. *Program or Be Programmed: Ten Commands for a Digital Age*. New York: OR Books.
- SALEN, KATIE AND ERIC ZIMMERMAN. 2004. *Rules of Play: Game Design Fundamentals*. Cambridge, MA: The MIT Press.
- SCHÄFER, MIRKO TOBIAS. 2011. *Bastard Culture! How User Participation Transforms Cultural Production*. Amsterdam: Amsterdam University Press.
- SCHÄFER, MIRKO TOBIAS. 2006. "Spielen Jenseits der Gebrauchsanweisung. Partizipation als Output des Konsums Software-Basierter Produkte." In *Das Spiel mit dem Medium. Partizipation - Immersion - Interaktion*, edited by Britta Neitzel and Rolf F. Nohr, 296-312. Marburg: Schüren Verlag.
- SCHILLER, FRIEDRICH. 1967/1795. *On the Aesthetic Education of Man*. Oxford: Oxford University Press.
- SILVERSTONE, ROGER. 1999. *Why Study the Media?* London: Sage.
- SIMONS, JAN. 2007. *Playing the Waves. Lars von Trier's Game Cinema*. Amsterdam: Amsterdam University Press.
- SUTTON-SMITH, BRIAN. 1997. *The Ambiguity of Play*. Cambridge, MA: Harvard University Press.
- THIMM, CAJA. 2010. *Das Spiel: Muster und Metapher der Mediengesellschaft*. Wiesbaden: VS Verlag.
- TULLOCH, JOHN AND HENRY JENKINS. 1995. *Science Fiction Audiences. Watching Doctor Who and Star Trek*. London: Routledge.
- TURNER, ERIC. 2013. "The 5 Star Movement and Its Discontents: A Tale of Blogging, Comedy, Electoral Success and Tensions." *Interface* 5(2): 178-212.
- TYKWER, TOM. 1998. *Lola rennt*. Directed by Tom Tykwer. Geiseltasteig: Bavaria Media.

- VAN DEN BOOMEN, MARIANNE, SYBILLE LAMMES, ANN-SOPHIE LEHMANN, JOOST RAESSENS AND MIRKO TOBIAS SCHÄFER. 2009. *Digital Material. Tracing New Media in Everyday Life and Technology*. Amsterdam: Amsterdam University Press.
- VAN DIJCK, JOSÉ AND DAVID NIEBORG. 2009. "Wikinomics and Its Discontents: A Critical Analysis of Web 2.0 Business Manifestos." *New Media & Society* 11(5): 855–874.
- VAN GRINSVEN, CHRISTEL AND JOOST RAESSENS. Forthcoming. "The Netherlands." In *Video Games Around the World*, edited by Mark J. P. Wolf. Cambridge, MA: The MIT Press.
- VAN KRANENBURG, KARIN, MIJKE SLOT, MARTIJN STAAL, ANDRA LEURDIJK, JAN BURGMEIJER. 2006. "Serious Gaming. Onderzoek Naar Knelpunten en Mogelijkheden van Serious Gaming." Accessed April 1, 2014.  
<http://repository.tudelft.nl/view/tno/uuid%3A1c3e4a1f-b6b9-4a30-a8af-fb8b961b434f/>.
- VAN UDEN, JACCO. 2011. *Serious Gaming: Vergezichten op de Mogelijkheden*. Den Haag: Stichting Toekomstbeeld der Techniek.
- VATTIMO, GIANNI. 1998. "Die Grenzen der Wirklichkeitsauflösung." In *Medien-Welten Wirklichkeiten*, edited by Gianni Vattimo and Wolfgang Welsch, 15–26. München: Wilhelm Fink.
- VATTIMO, GIANNI. 1992. *The Transparent Society*. Malden: Polity Press.
- VOERMANS, WIM. 2010. "Spelregels Formatie Uit de Tijd." *de Volkskrant*, September 9.
- ZAGAL, JOSÉ P. 2010. *Ludoliteracy*. Pittsburgh: ETC Press.
- ZIMMERMAN, ERIC. 2009. "Gaming Literacy: Game Design as a Model for Literacy in the Twenty-First Century." In *The Video Game Theory Reader 2*, edited by Bernard Perron and Mark J. P. Wolf, 23–31. New York: Routledge.
- ZIMMERMAN, ERIC AND HEATHER CHAPLIN. 2013. "Manifesto for a Ludic Century." *Kotaku*, September 9.  
<http://kotaku.com/manifesto-the-21st-century-will-be-defined-by-games-1275355204>.

## LUDOGRAPHY

- CALL OF DUTY. 2003. Developed by Infinity Ward. Windows. Activision.
- FOOD FORCE. 2005. Developed by Deepend and Playerthree. Windows, OS X. United Nations World Food Programme.
- HEINEKEN STAR PLAYER. 2011. AKQA.  
<http://www.akqa.com/#/work/heineken/star-player>.
- MADRID. 2004. Developed by Newsgaming.com. Browsergame. Newsgaming.com.
- MCDONALD'S VIDEO GAME. 2006. Developed by Molleindustria. Browser game. Molleindustria.
- MEDAL OF HONOR. 1999. Developed by DreamWorks Interactive. PlayStation. Electronic Arts.
- SEPTEMBER 12TH: A TOY WORLD. 2003. Developed by Gonzalo Frasca. Browser game. Newsgaming.com.
- WORLD OF WARCRAFT. 2004. Developed by Blizzard Entertainment. Windows, OS X. Blizzard Entertainment.