1.   The playful citizen: An introduction

René Glas, Sybille Lammes, Michiel de Lange, Joost Raessens, and Imar de Vries

With the emergence of digital and mobile technologies, our conceptions and hopes of what citizen participation entails have changed profoundly. It seems as though interactive, networked, and cheap technologies have greatly democratized how literacies, knowledge, and power structures are generated and perceived in everyday life and that they have increased—and have further potential to increase—the degree of civic engagement. From playing, modifying, and designing games and interactive documentaries, and using playful tools and games for the production of alternative knowledges, to becoming protest-cartographers or pollution measurers, citizens appear to engage with, alter, and probe media technologies to a far greater extent than ever before. At the same time, we should be critical of what exactly these apparently enabling technologies do, and question what the drawbacks and the possibilities of digital media are for civic engagement.

In this edited volume, we provide an overview of the potentials and limitations of citizen engagement in the digital age through a selection of contributions from various academic fields. These contributions discuss the many digital media technologies and developments that grew to prominence in the second decade of this century. From the Occupy Wall Street movement to the development of citizen science games, from new forms of participatory documentary film-making to the rise and exploits of Reddit users, unifying all these topics is a sustained focus on what we consider to be *ludic*, or *playful*, engagement. It is through this view, we argue, that forms of partaking such as DIY, journalism, research, activism, art, or politics are to be understood. We would like to share a particularly striking example here, found in the 2010 exhibition *Space Invaders*, organized by the National Gallery of Australia. Referring to the eponymous 1978 arcade video game, this playful exhibition celebrated the energy of graffiti culture and its street-based creativity (Babington 2010). Street artist MEEK's contribution *Begging For Change* shows a homeless man holding a sign that reads "Keep your coins, I want

change." This work's explicit word play exhibits powerful social comments about the inadequacy of non-binding charity and compassion, and about the need for structural change (see Mouffe 2013, 64). From this particular instance of playful social commentary, we find we can extrapolate many other clues as to how forms of public participation in the early twenty-first century can be understood. Play, we posit, is an important theoretical principle for comprehending new manifestations of civic engagement.

With this book, we therefore want to further our interdisciplinary understanding of how media and citizenship can converge in contemporary culture through the lens of play. In an era in which play has left the traditional playground and has pervaded domains traditionally perceived as non-playful, we need to get a better analytical purchase on how this shift has changed our approaches to citizenship as well as to media. The ongoing ludification of culture (Raessens 2014) and ludification of identity and self (Frissen et al. 2015) prompts us to rethink what citizenship is and how it can be understood, enacted, analyzed, and conceptualized in relation to media and play. If we have become more playful as citizens, in what ways and through which media is this manifested in our daily lives? Which media practices can we discern as evidencing and letting us understand the reciprocal relationship between ludification and citizenship? And should these practices be viewed as new ways to enhance and change the agency of citizens, or rather as facilitating and maintaining dominant hegemonies or assemblages of power (e.g. Lammes and Perkins 2016)? We set out to give a pluralistic answer to such questions by bringing together scholars from different fields. They discuss a plethora of themes and topics, from game design to politics, pertaining to playful citizenship in the digital age.

The multifaceted framework we offer in this book builds on a corpus of academic literature that has previously drawn attention to the phenomenon of the ludification of culture and how culture can be understood through a playful lens (Fuchs 2012;[1] Fuchs et al. 2014; Walz and Deterding 2015). It is important here 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 is ontological if it refers to a "new phase of history characterized so much by play that we can deem it a play world" (Combs 2000, 20). Or, as Eric Zimmerman declares in his *Manifesto*, if the claim is that we are living in a "Ludic Century" (2015).

In this book, we do focus on this ontological aspect of ludification of culture and society; however, our claim is also of an epistemological nature.

---

1   All references to online sources were current as of 5 November 2018.

We argue that the concepts of play and the ludification of culture are crucial for understanding what we call the "ludic turn in media theory" (Raessens 2014, 109), and should be used as heuristic tools to shed new light on contemporary notions of citizenship, as lenses that make it possible to see new objects and phenomena in a different light and study them in a particular way. Both concepts enable us, as theorists, to identify poignant aspects of today's media culture—and to construct a specific conceptual perspective on this culture. Zimmerman's claim that we are living in a ludic century is both too broad and too narrow: it is too broad because it seems to suggest that we should have the whole twenty-first century as our research locus, and it is too narrow because the kind of research Zimmerman advocates is restricted to a game studies perspective. Our approach is rather more finely drawn: we argue that we should become more specific by studying particular cultural, scientific, and political fields and practices, and by doing so take into account broader developments that we wish to label as the 'ludic' or 'playful' turn taking place in these domains.

In tandem with academics noting a ludification of culture, especially in the social sciences, scholars have become increasingly interested in how digital and analog media can be used to engage citizens with their environments. From local citizen science projects (Nold 2009; Gabrys et al. 2016) to experimental, creative, and embodied projects (Calvillo 2012; Last 2012; McCormack 2013), these studies shed light on how media technologies can stimulate citizen participation through their performative, experimental, and creative affordances. While such studies at times implicitly relate citizenship to the ludic, we argue that creativity, experimentation, open-endedness, and playful citizenship should be examined more directly as well.

This book is indebted to a rich array of studies that directly or indirectly examine the relation between citizenship, media technologies, and play. However, we want to take a step further in how we tie such perspectives together. What has not been thoroughly examined so far is how these three can be approached as a *triadic* relationship. Although studies about citizen science games, for example, may draw attention to the relation between science and games, they often underplay what citizenship is about. To be clear, it is often impossible to give equal attention to all three aspects and their reciprocal relations in individual studies, but it is precisely for this reason that an ordering, clustering, and contextualization of cases and analyses is needed to truly understand this triadic relation between citizenship, media, and play from a critical perspective.

We are convinced that such an ordering should go beyond disciplinary boundaries if we really want to start to understand citizenship, media, and

play from a multilayered perspective. The collected texts offer the reader a pluralistic perspective: we invited scholars and collected insights from diverse fields such as (new) media studies, politics, science and technology studies, critical geography, design studies, game studies, play studies, communication studies, and urban studies. This book should speak to anyone interested in how citizenship, media, and play are unfolding in the digital age and how we can develop a multifaceted and situated perspective to understand their relations and connections in productive ways. By bringing together a plethora of historical and more recent cases, and by including authors hailing from different fields to examine such phenomena, we present a book that critically investigates manifestations of citizenship, media, and play in contemporary digital culture.

Citizenship, media, and play

Our point of departure is the changing notion of what citizenship entails in our contemporary digital media culture. As Joyce Neys and Jeroen Jansz argue in their chapter in this volume, the importance of contributing to and interacting with democracy's formal institutions is increasingly complemented by citizens who express their political and civic engagement in different, playful ways. Analyzing the notions of play and playful media should subsequently enable us to better conceptualize our idea of 'playful citizenship'.

Yet, as discussed before, this book aims to respond to the academic status quo in which the triadic relationship may have been under-theorized, but where *dual* relations have been conceptualized to a far greater extent. As will be discussed below, the relationship between certain pairs within our triad of citizenship-media-play has already been fairly well studied, namely in the case of media and citizenship, and of playful media. Our line of argumentation is as follows. First, the relationship between media and citizenship stands in a long theoretical, predominantly sociological tradition, including the more interdisciplinary field of communication studies. Therefore, discussions overwhelmingly emphasize citizenship as shaped by information and communication media (mass media and more recently social media). Recently, more attention has been paid to other technologies, practices, and approaches. This includes gaming, urban mobile media use, sensing technologies, datafication, media practices other than mostly rational and deliberative communication practices, and an emphasis on the imaginative, creative, and affective as important dimensions for

understanding civic media. Second, we observe that media and associated media cultures have become more playful. Many authors point to this ludification of digital technologies, and the culture of playfulness this fosters and taps into. Accordingly, we also need to redefine citizenship as *playful* and make clear what this notion of playful citizenship means within the domains of culture, science, and politics.

New media and changing civic engagement

Civic participation can be described as the extended involvement of individuals in a collective political decision-making process (Gordon and Mihailidis 2016; Koc-Michalska, Lilleker and Vedel 2016; Skoric et al. 2016). Broadly speaking, we can discern a rights-based model of citizenship, a duty-based sense of citizenship, and a contemporary kind of actualizing citizenship (cf. Hartley 2010). Each of these models highlights a different type of civic agency and mode of participation. And, as Kligler-Vilenchik notes, each citizenship model come with its own way of understanding media in relation to citizenship (Kligler-Vilenchik 2017, 1890).

First, in the rights-based view of citizenship, instruments for civic participation include voting, campaigning, demonstrating, contacting elected representatives, joining political organizations, access to the judicial system, and so on. This emphasis on institutions underpins an understanding of citizenship in terms of what Margaret Somers calls "the right to have rights" (2008, xiv). This citizenship model highlights the power dynamics between state, market, and civil society. Governments are often the legal owners of issues and the ultimate decision-makers. Communication tends to be managed by authorities. Citizens have varying degrees of rights to obtain information and limited opportunity to voice their opinions using media. With the rise of mass media, a plethora of institutions and (global) corporations have increasingly started to lobby for their interests and likewise have become political agents that use various media strategically.

Second, in what Bennett, Wells, and Freelon (after Schudson 1998) refer to as 'dutiful citizenship,' individuals participate in civic life by joining or forming organized groups, by becoming more informed via the news, and by engaging in public life based on a sense of personal or collective duty (2011, 838). This model of citizenship understands civic participation as being driven by a sense of responsibility, or out of obedience to public authorities (Ibid., 839). Thus, citizenship is a form of socialization.

Third, digital media technologies are frequently understood as a driving force of civic participation. This would necessitate a reconceptualization of

citizenship. In the context of studies of young people's use of online media, Bennett, Wells, and Freelon identify the rise of what they call 'actualizing citizenship,' in order to draw attention to the ways in which self-expression, emotional involvement, and intrinsic motivation are key elements in peer networks sustained via social media. Elsewhere, Bennett and Segerberg argue that we need to rephrase 'collective action,' based on high levels of organizational resources and the formation of collective identities, as 'connective action,' which is based on personalized content sharing across media networks (Bennett and Segerberg 2012). Other authors have similarly focused on civic involvement through various media as a way to highlight everyday practices of the political rather than formalized institutional politics. With digital media technologies, 'networked publics' can engage with shared issues and material objects of concern (Latour 2005; Marres 2007, 2012; Varnelis 2008). Technologies empower people to monitor issues collectively and act upon them. Schudson calls this kind of active civic engagement 'monitorial citizenship' (Schudson 1998, 311-312). In this changing landscape of mediated citizenship, citizens increasingly feel a sense of collective ownership of complex (urban) issues (De Lange and De Waal 2013). At the same time, John Hartley observes the emergence of a 'silly citizenship' (Hartley 2010), in which comedy, satire, viral videos, and other manifestations of playful media revolve around attracting people's attention in the mediated political landscape. Hartley observes: "It is as much dramatic and performative as it is deliberative. The play's the thing, as DIY-citizens, many of them children, perform their own identities and relations" (Ibid., 241).

Civic engagement thus is increasingly understood in this third sense, by focusing on personal experiences and affectively charged social networks. Some have argued that digital media afford more casual practices of engagement. Critics highlight how media divert attention away from real issues and trick people into pseudo-participation, bordering on 'make-believe' involvement, with 'slacktivism' and 'clicktivism' (e.g. Morozov 2011; Tufekci 2017). While these authors take a very critical perspective, Alex Gekker, in his contribution to this volume, takes into account the limitations and opportunities of this development. He reworks Jesper Juul's notion of 'casual games' (Juul 2009) and calls this new type of participation 'casual politicking'.

Most theories on media and citizenship focus on communication aspects and, by extension, community dynamics. In communication studies and sociology, a key debate in the discussion about media and civic engagement concerns reinforcement theory versus mobilization theory. The reinforcement thesis holds that media cater for more of the same and thus help to

establish more firmly what someone already believes. This is frequently labeled using terms like balkanization, filter bubble, capsularization, or parochialism. Mobilization theory, by contrast, argues that media expose people to new ideas and different perspectives, and therefore allow people to become better acquainted with ideas and standpoints beyond their known world. In terms of social capital, the reinforcement thesis emphasizes the tendency of media to strengthen 'bonding capital' and 'strong ties,' while the mobilization thesis underlines the potential of media to foster 'bridging capital' and 'weak ties' (Skoric et al. 2016). Mercedes Bunz, in her contribution, uses this tension to highlight how digital media can both facilitate increased participation and, at the same time, contribute to an additional splintering of publics.

Further specifying the relationship between new media and citizenship, we can identify three groups of questions, dealing with information, communication, and action. First, an information-based understanding of citizenship looks at what constitutes 'the well-informed citizen.' The 'good citizen' is a well-informed citizen. What happens to citizenship when digital media technologies and platforms become prominent as new sources of information? For example, in their chapter, Jessica Breen, Shannon Dosemagen, Don Blair, and Liz Barry address the question of what constitutes new types of citizen-generated information and knowledge, and how this is conveyed. Second, a communication-based view approaches citizenship in terms of social identities. The good citizen is a community member, local or imagined. What happens to this communal type of citizenship with the rise of digital media technologies and practices? Digital media shape how we connect to and feel part of groups, communities, and publics. New forms of distribution and the digital self that have emerged in the digital age complicate our senses of belonging and identity. Again, play is an important element for understanding this shift in social identity. Jennifer Gabrys, for instance, analyzes community-led citizen sensing projects in her contribution as a new form of environmental citizenship. Third, a focus on action highlights how citizenship emerges by doing things collectively, often with a common purpose. The good citizen is a creative entrepreneur. How do digital media technologies afford new modes of action? For instance, in his chapter, Douglas Rushkoff analyzes these issues by focusing on the Occupy movement, while William Uricchio focuses on how people actively engage with interactive documentaries.

Play and playful media

In this introduction and throughout this book, we develop a framework for approaching citizenship in the digital age through play, with play as both a heuristic tool for understanding citizenship (a way of looking), and a set of civic practices (a way of doing). A key strength of the notion of playful citizenship is that it opens up a productive space to start reconceptualizing citizenship in a post-identitarian age, venturing beyond sedimented categories of group affiliations. Play offers a new set of terms to recast today's practices around citizenship in more dynamic and processual terms: as experimental, as rehearsal, as continual competition, as joking and mischievous, as engaging and participatory, as a type of meta-communication, and so on.

An important step in our argument is that media themselves have playful qualities that warrant a reconceptualization of citizenship. Although play has always been a constituent element of many cultural practices (Huizinga 1955), since the 1960s, a tendency can be discerned in which daily cultural practices have become far more imbued with play. This cultural shift has further accelerated with the emergence of a myriad of digital technologies, which impels us to think of the modern digital age in terms of a playful media culture (Frissen et al. 2015) where play has become increasingly connected with daily activities. This is, for example, evident in our changing attitudes to work, travel, politics, or the economy. But let us first unpack the notion of play.

Most people would associate the activity of play with games, but to engage with the notion of play in a broader socio-cultural perspective we start from a more general definition. A very basic definition is given by Salen and Zimmerman, who consider play as "free movement within a more rigid structure" (2004, 304). While some chapters in this volume do discuss play in relation to games, in other chapters play is understood in this very general form: as seeking the 'play' in an established mechanism or structure, which can be a media technology, but also politics, art, or scientific research. In both a game-related definition and a more general one, play can be considered a problem-solving force. As Salen and Zimmerman point out, "when play occurs, it can overflow and overwhelm the more rigid structure in which it is taking place, generating emergent, unpredictable results," potentially even leading to transformative play where "the force of play is so powerful that it can change the structure itself" (Ibid., 305). The notion of play having transformative power has by now been pushed far beyond games—think of notions of 'critical play' (Flanagan 2009) and 'carnivalesque play' (Sicart

2014), or of popular game designers like Jane McGonigal foreseeing "games that augment our most essential human capabilities—to be happy, resilient, creative—and empower us to change the world in meaningful ways" (2011, 14). Such lines of reasoning have since become very much in vogue as the simultaneous ludification and digitization of culture has given rise to new connections between citizenship and participatory media technologies that are shaping our culture.

The connection between media technologies and play is, of course, not new. Scholars within and well beyond the field of game studies have already established the link between various media and play (Stephenson 1967; Fiske 1987; Silverstone 1999; Kerr, Kücklich, and Brereton 2006; Raessens 2006; Simons 2007; Buckland 2009; Sicart 2014; Frissen et al. 2015), but very few of these studies focus on the sociocultural implications of this playfulness in media, let alone on citizenship.

We should be cautious, though, not to overstate the potential of play and, consequently, games and other playful media. In their critical political analysis of the digital gaming phenomenon, Nick Dyer-Witheford and Greig de Peuter remind us that we should not consider play as necessarily or inherently empowering or democratizing (2009). For them, games are also the exemplary media of 'Empire,' Hardt and Negri's concept for describing postmodern global capitalism (2000). Similarly critical views have also already been expressed about phenomena like gamification (e.g. Bogost 2011a, 2011b; Fuchs et al. 2014; Walz and Deterding 2015). The question remains in what ways we have become empowered and where the limitations of our participatory powers lie. Games can motivate citizens to engage in citizen science and make players become ecological citizens by encouraging support, sympathy, and action for a variety of scientific and ecological issues. Cheap embeddable sensors, portable wireless communications, and computation technologies, paired with crowd-sourcing, networking, and co-creation principles from online culture, may all leverage citizens' involvement in gathering, visualizing, disseminating, and producing data, information, and forms of knowledge and culture. Even though they may inspire citizens to become involved and thus help overcome asymmetries between where power is produced and where it is 'lived' (see Latour 2003), we still need to examine further where exactly their strength lies as well as the limitations of the affordances such media technologies really offer to change the way we perceive and engage in active citizenship (see also the chapters by Anne-Marie Schleiner and Ingrid Hoofd in this volume).

Another gap we aim to fill is giving attention to some of the sociocultural implications of an increasingly playful media landscape. Lievrouw and

Livingstone (2002) propose that we think of media as composed of three elements: technical devices, social practices, and institutional arrangements. This provides a useful framework to zoom in on the playful qualities of media technologies. At the level of devices, we can see that Information and Communication Technologies (ICTs) have playful affordances (see also the chapter by Joost Raessens in this volume). In addition, we observe that new technologies are often approached and understood in playful ways, opening up room for playful exploration and experimentation. At the level of practices, we similarly see a plethora of playful or lusory attitudes (Suits 1978) and uses of ICTs that can be extended to reflections about playful citizenship. Think about the origins of computing culture in the playful hacking practices of MIT students, and hardware hackers of the West Coast (see also the chapter by Stefan Werning in this volume). Thirdly, at the level of institutional arrangements and protocols, we contend that play is a productive heuristic for focusing on more structural aspects of media and citizenship. On the one hand, play provides a rich arsenal of strategies to deal with today's complexity, uncertainty, risk, and network society. We see this in new arrangements for innovation and creativity: experimentation, (urban) living labs, self-learning networks, social movements, with room for improvisation and failure (see also the chapters by Eric Gordon and Stephen Walter, and by Mark Deuze and Lindsay Ems in this volume). On the other hand, play highlights the fact of *being played*: under the moniker of participatory media, people are being nudged into compliance, as a neoliberal ploy to extract free labor veiled as creative play done of your own free will (see also the chapter by Sonia Fizek and Anne Dippel in this volume).

Playful citizenship

So far in this introductory chapter, we have discussed the dual relationships between media and citizenship on the one hand, and media and play on the other. We now want to focus on the link between play and citizenship. One of the first scholars who paid attention to this relationship was the Dutch historian Johan Huizinga, who, in his *Homo ludens* (1955), put forward the notion of play as generative and constituting the 'origin' of human civilization. He concludes his long treatise on play with the argument that "civilization is, in its earliest phases, played. It does not come *from* play like a babe detaching itself from the womb: it arises *in* and *as* play, and never leaves it" (1955, 173, emphasis in original). It is important to point out here that Huizinga was critical about the interwar period, when he saw the play element in culture turn into barbaric "puerilism" (Ibid., 205). To tie this into

our argument with some poetic license, he was also aware that play could spoil the potential for civic engagement. He nonetheless pointed out that:

> [R]eal civilization cannot exist in the absence of a certain play-element, for civilization presupposes limitation and mastery of the self, the ability not to confuse its own tendencies with the ultimate and highest goal, but to understand that it is enclosed within certain bounds freely accepted. Civilization will, in a sense, always be played according to certain rules, and true civilization will always demand fair play. (Ibid., 201)

Building upon Huizinga's ethical reflections, we contend that play is an indispensable ingredient for building a civic society and citizenship. Yet, we are also critical of how Huizinga, motivated by the troubled interwar period, relates 'good' civilization to sticking to the rules of play. Instead, we also see potential in *not* playing by the rules, in bending rules, or changing rules. For Huizinga, cheating and being a spoilsport "shatters civilization" (Huizinga 1955, 201). However, there have since been many instances that demonstrate that transgressive forms of play can also present and produce new forms of civil resistance, or even ludic anarchy, the latter powerfully demonstrated by the Situationist movement in the late 1950s and 1960s. Such playful practices, in which citizens as players, political activists, artists, or provocateurs creatively engage with bending, shattering, or ignoring rules, can result in highly productive ways for citizens to engage with and give shape to their civic society.

The unruly dimension of play and citizenship is addressed by René Glas and Sybille Lammes in this volume when they discuss ludo-epistemology and meaningful citizen participation in processes of knowledge production. It is also touched upon by Ben Schouten, Erik van der Spek, Daniël Harmsen, and Ellis Bartholomeus, as well as by Stephanie de Smale, in their analyses of non-expert forms of knowledge production. Furthermore, in the contribution by Michiel de Lange attention is drawn to the destabilizing, yet productive potential of play when speaking about creative engagement with urban issues, while Sam Hind points to creative aspects of protest as a disruptive human and non-human practice.

We want to show the situatedness of playful citizenship and how specific cases either destabilize, or consolidate notions of citizenship and society through creative and playful approaches. As such, we see play as a manifold phenomenon and are critical, yet open to how it can change, stabilize, and undermine our classical notions of citizenship. We want to offer readers a kaleidoscopic view of the ludic potential of playful citizenship.

Structure of the book

Now that we have established the notion of playful citizenship, we want to present it as a productive label for bundling and identifying common threads in a variety of empirical phenomena as interrelated, from citizen science to political activism, from online gaming to urban planning. To give structure to the breadth of contributions, we have divided this book into three parts, each pertaining to the notion of play: ludo-literacies, ludo-epistemologies, and ludo-politics. These three parts, discussed below, form a new way of ordering the emerging technologies and developments of the past decade that relate to the notion of playful citizenship. The three parts of the book do not delineate strict borders; inevitably there is quite some overlap in themes and topics. The chapters in each part nonetheless point toward a specific relational context in which we can situate and understand contemporary playful citizenship.

Ludo-literacies

As indicated earlier, play is permeating our daily lives more than ever. It is not just the omnipresence of games in many people's media diet, but the ludification of culture in general that should be addressed to understand this properly. And, as Matthias Fuchs argues, "societies with high lusory attitude will turn anything into games or into toys," which results in media technologies with increasingly ludic interfaces, thus advancing the process of ludification ever further (Fuchs 2012). This makes it all the more important to be able to understand the nature of contemporary games and play as part of critical media literacy.

According to Zagal, games literacy entails having the ability to play games, the ability to understand meanings with respect to games, and the ability to make games (2010, 23). Whereas the ability to play is functional, the ability to understand games is critical. Zagal defines understanding games as "the ability to explain, discuss, describe, frame, situate, interpret, and/or position games" in the context of human culture, other games, technological platforms and their ontological components (Ibid., 24). The third ability of games literacy moves from critical to creative, as understanding turns into the more active role of designing one's own preconditions for play.

For Zimmerman, this design-oriented take on literacy is key for what he calls *gaming* literacy, a new set of cognitive, creative, and social skills that point to "a new paradigm for what it will mean to become literate in the coming century" (2009, 25). Zimmerman thinks the mischievous

meaning connoted by the term 'gaming' (rather than by 'games') is deliberate: "Gaming a system, means finding hidden shortcuts and cheats, and bending and modifying rules in order to move through the system more efficiently—perhaps to misbehave, but perhaps to change that system for the better" (Ibid.). Here, we see notions of games literacy that, through their critical and creative dimensions, align with more critical takes on media literacy that focus on active citizenship. As Kellner and Share point out:

> Critical media literacy involves cultivating skills in analyzing media codes and conventions, abilities to criticize stereotypes, dominant values, and ideologies, and competencies to interpret the multiple meanings and messages generated by media texts. Media literacy helps people to use media intelligently, to discriminate and evaluate media content, to critically dissect media forms, to investigate media effects and uses, and to construct alternative media. (2005, 372)

They too stress the importance of being able not only to understand media, but also to intervene through participatory, creative media practices.

In the chapters in *Part I: Ludo-literacies*, we take these three different aspects of games-related literacies as our point of departure. Joyce Neys and Jeroen Jansz show that playing political games can contribute to an increase in political participation and political engagement. Next, Stefan Werning and William Uricchio analyze how designing, modifying, and producing games and interactive documentaries can be considered to be forms of creative, cultural, and political expression, as a means of developing the player's critical understanding of the medium. Finally, Joost Raessens, Anne-Marie Schleiner, and Ingrid Hoofd claim that making sense of games requires an understanding of the social, cultural, and political context in which these games are made and played.

Ludo-epistemologies

In the second part of this book, we look at the connections between play, media, and citizenship from the perspective of knowledge production. Using the term 'ludo-epistemology,' we have grouped together authors who use different perspectives on whether play and epistemology can form productive relations and how this is done. Under the header of ludo-epistemology, we see strategies that move away from a top-down conception of knowledge production, instead incorporating citizens' daily practices into the equation. Inspired by Feyerabend's term 'anarcho-epistemology,' which he introduced

to prompt a radical transformation in how knowledge is understood and made—scientists are citizens too—we argue for a shift to focus on play in order to achieve this. Similar to Feyerabend's (1978, 1987, 1993) anarchic and somewhat 'messy' (see Law 2004), yet possibly less radical approach, play also has strong potential for overcoming asymmetrical relations between traditional bastions of knowledge production (e.g. the laboratory) and how techno-science is used in daily life by citizens (Latour 2003). However, it puts more emphasis on the creative, imaginative, subversive, and inquisitive qualities that can be part of knowledge production. This is exactly what lies at the core of this part of the book: it is through play that epistemology becomes more participatory.

We agree with Sutton-Smith (2001) that play is always ambiguous and can be attributed contradictory or paradoxical meanings. In relation to knowledge production, ambiguity affects not only play, but also a preconception regarding the distinction between science and citizenship. According to this view, citizens are considered lay people while scientists are experts. Such thinking, we argue, prevents us from developing more innovative strategies (in design, method, or thinking) for meaningful connections between citizenship and science that truly use the potential of the playful citizen as an actor in techno-scientific knowledge production. At the same time, the contributions to this part of the book show that we need to keep a close eye on critical questions about when and how modes of play, like tinkering, tweaking, reshaping, and even cheating, become tools that subvert or even clash with knowledge production in terms of usefulness and the ethics of participation and civic action.

Part II: Ludo-epistemologies aims to give answers to these questions from two key perspectives. The first three chapters of this section zoom in on citizen science projects as they are enacted in daily live. From Jessica Breen, Shannon Dosemagen, Don Blair, and Liz Barry describing the hands-on tactics advocated by the Public Lab for mapping pollution, to the sensing projects examined and compared by media and science and technology studies scholar Jennifer Gabrys, and the biohacking project discussed by game and media scholar Stephanie de Smale, these chapters offer the reader a taste of ways in which play can be used in everyday life to turn citizens into experts and give them a creative voice in producing 'artefacts' that can have a direct impact on their livelihood and well-being. The last three chapters in this section also form a triad, this time centering on the potential and pitfalls of citizen science games. René Glas and Sybille Lammes combine science and technology studies (STS) and game studies perspectives to arrive at recommendations on how to change the aforementioned asymmetries, while

Ben Schouten, Erik van der Spek, Daniël Harmsen, and Ellis Bartholomeus approach this from a design perspective. Lastly, Sonia Fizek and Anne Dippel are perhaps less optimistic when they warn how the labor involved in citizen science games can also be used to enforce neoliberal ideologies.

Ludo-politics

The third part of this book collects contributions discussing how ludic engagement with digital media technologies offers new opportunities to 'act politically.' These chapters suggest several tensions in the relationship between playful media and political agency. While acknowledging that these tensions cannot be completely resolved, the authors investigate where and how those tensions occur, and what perspectives help in understanding the limitations and opportunities in dealing with them.

The first tension frames playful media between strengthening individual and collective agency, and co-optation. Playful media can help to build networked publics around shared issues of concern, but can also consolidate existing institutional structures and corporate interests. Cloaked as fun and play, they foster pseudo-participation or 'tokenism' (Arnstein 1969), confining agency to what Müller (2009) terms 'formatted spaces of participation.' Some argue that discourses about participatory media as disruptive change agents in effect serve as simulacra for true political action. In an age of political consensus—which Chantal Mouffe (2005) has called 'post-politics'—the logic of participatory media platforms sustains the neoliberal consensus, and a 'Californian ideology' of individual responsibility and entrepreneurialism. A closely related second tension revolves around the question of whether social media platforms help to strengthen or erode collective action and public values. A growing number of authors—e.g. Trebor Scholz (2016); Van Dijck, Poell and De Waal (2018)—are critical of what is called the 'sharing economy.' Play then acts as a thin veneer for an underlying political economy of relentless extraction of free or low-paid labor and value. Recent publications (e.g. Rathenau Institute 2017) underline the possible harm this increasing reliance on participatory platforms could do to historically nurtured public values and democratic institutions. A third tension is whether playful media help to unify the public realm or further accentuate social differences. As discussed above, some people are ludo-literate and make productive use of media technologies, whereas others may not be able to. Hence civic rights are not the same for all. Playful media thus may contribute to social sorting by fragmenting the public into what we could call participation readiness levels.

Throughout *Part III: Ludo-politics*, authors explore how playful media, ludic strategies, and tactics are employed in civic contexts to deal with these tensions. Mercedes Bunz sets the scene by arguing that new and playful forms of political participation do not necessarily allow revolutionary change and may not even provide sufficient friction and debate for real changes to occur. The four chapters that follow aim to show that there *are* productive frictions that can be generated in playful citizen activities, by staging carnivalesque interventions that use Twitter as a means for organizing and disrupting activities (Sam Hind), by incorporating play-like 'meaningful inefficiencies' in all kinds of everyday societal processes and systems (Eric Gordon and Stephen Walter), by approaching political gatherings from a player/hacker's point of view, rewriting general assembly rules and prototyping new ones (Douglas Rushkoff), or by moving away from efficiency-driven plans for building 'smart cities' to more serendipity-embracing projects including the participation of people in creating 'playful cities' (Michiel de Lange). The last two chapters in the book advocate a cautionary stance in analyzing and praising playful uses of new media technologies to create fissures in power. Playful citizenship is not guaranteed to deliver on its promises when it is driven by a means-over-end attitude (Mark Deuze and Lindsay Ems), or when the political arena itself becomes a game in which people predominantly casually participate (Alex Gekker).

References

Arnstein, S. R. 1969. A ladder of citizen participation. *Journal of the American Institute of Planners* 35 (4): 216-224.

Babington, J. 2010. *Space Invaders: Australian street | Stencils | Posters | Paste-ups | Zines | Stickers*. Canberra: National Gallery of Australia.

Bennett, W. L., C. Wells, and D. Freelon. 2011. Communicating civic engagement: Contrasting models of citizenship in the youth web sphere. *Journal of Communication* 61 (5): 835-856.

Bennett, W. L., and A. Segerberg. 2012. The logic of connective action: Digital media and the personalization of contentious politics. *Information, Communication & Society* 15 (5): 739-768.

Bogost, I. 2011a. Gamification is bullshit. *Ian Bogost*. http://www.bogost.com/blog/gamification_is_bullshit.shtml.

—. 2011b. Persuasive games: Exploitationware. *Gamasutra*. http://www.gamasutra.com/view/feature/134735/persuasive_games_exploitationware.php.

Buckland, W. 2009. *Puzzle films: Complex storytelling in contemporary cinema*. Hoboken, NJ: Wiley Blackwell.

Calvillo, N. 2012. The affective mesh: Air components 3D visualizations as a research and communication tool. *Parsons Journal for Information Mapping* 4 (2): 1-8.

Combs, J. E. 2000. *Play world. The emergence of the new ludenic age*. Westport, CT: Praeger Publishers.

De Lange, M., and M. de Waal. 2013. Owning the city: New media and citizen engagement in urban design. *First Monday* 18 (11).

Dyer-Witheford, N., and G. de Peuter. 2009. *Games of Empire: Global capitalism and video games*. Minneapolis, MN: University of Minnesota Press.

Feyerabend, P. 1978. *Science in a free society*. London: New Left Books.

—. 1987. *Farewell to reason*. London: Verso Books.

—. 1993. *Against method*. London: Verso Books.

Fiske, J. 1987. *Television culture*. New York: Routledge.

Flanagan, M. 2009. *Critical play: Radical game design*. Cambridge, MA: The MIT Press.

Frissen, V., S. Lammes, M. de Lange, J. de Mul, and J. Raessens, eds. 2015. *Playful identities: The ludification of digital media cultures*. Amsterdam: Amsterdam University Press.

Fuchs, M. 2012. Ludic interfaces: Driver and product of gamification. *G|A|M|E Journal* 1 (1). http://www.gamejournal.it/ludic-interfaces -driver-and-product-of-gamification.

Fuchs, M., S. Fizek, P. Ruffino, and N. Schrape, eds. 2014. *Rethinking gamification*. Lüneburg: meson press.

Gabrys, J., H. Pritchard, N. Calvillo, N. Shapiro, and T. Keene. 2016. Becoming civic: Fracking, air pollution, and environmental sensing technologies. In *Civic media: Technology | Design | Practice*, eds. E. Gordon and P. Mihailidis, 435-440. Cambridge, MA: The MIT Press.

Gordon, E., and P. Mihailidis, eds. 2016. *Civic media: Technology | Design | Practice* Cambridge, MA: The MIT Press.

Hardt, M., and A. Negri. 2000. *Empire*. Cambridge, MA: Harvard University Press.

Hartley, J. 2010. Silly citizenship. *Critical Discourse Studies* 7 (4): 233-248.

Huizinga, J. 1955. *Homo ludens: A study of the play-element in culture*. Boston, MA: Beacon Press.

Juul, J. 2009. *A casual revolution: Reinventing video games and their players*. Cambridge, MA: The MIT Press.

Kellner, D., and J. Share. 2005. Toward critical media literacy: Core concepts, debates, organizations, and policy. *Discourse: Studies in the Cultural Politics of Education* 26 (3): 369-386.

Kerr, A., J. Kücklich, and P. Brereton. 2006. New media – new pleasures? *International Journal of Cultural Studies* 9 (1): 63-82.

Kligler-Vilenchik, N. 2017. Alternative citizenship models: Contextualizing new media and the new "good citizen". *New Media & Society* 19 (11): 1887-1903.

Koc-Michalska, K., D. G. Lilleker, and T. Vedel. 2016. Civic political engagement and social change in the new digital age. *New Media & Society* 18 (9): 1807-1816.

Lammes, S., and C. Perkins. 2016. An introduction to playful mapping in the digital age. In *Playful mapping in the digital age*, eds. S. Lammes and C. Perkins. The Playful Mapping Collective, 12-27. Amsterdam: Institute of Network Cultures.

Last, A. 2012. Experimental geographies. *Geography Compass* 6 (12): 706-724.

Latour, B. 2003. *We have never been modern*. Cambridge, MA: Harvard University Press.

—. 2005. *Reassembling the social: An introduction to Actor-Network-Theory*. Oxford: Oxford University Press.

Law, J. 2004. *After method: Mess in social science research*. London: Routledge.

Lievrouw, L. A., and S. Livingstone. 2002. *Handbook of new media: Social shaping and consequences of ICTs*. London: SAGE.

Marres, N. 2007. The issues deserve more credit: Pragmatist contributions to the study of public involvement in controversy. *Social Studies of Science* 37 (5): 759-780.

—. 2012. *Material participation: Technology, the environment and everyday publics*. Houndmills: Palgrave Macmillan.

McCormack, D. P. 2013. *Refrains for moving bodies: Experience and experiment in affective spaces*. Durham, NC: Duke University Press.

McGonigal, J. 2011. *Reality is broken: Why games make us better and how they can change the world*. London: Jonathan Cape.

Morozov, E. 2011. *The net delusion: The dark side of internet freedom*. New York: PublicAffairs.

Mouffe, C. 2005. *On the political*. London: Routledge.

—. 2013. *Agonistics: Thinking the world politically*. London: Verso Books.

Müller, E. 2009. Formatted spaces of participation: Interactive television and the changing relationship between production and consumption. In *Digital material: Tracing new media in everyday life and technology*, eds. M. van den Boomen, S. Lammes, A. Lehmann, J. Raessens, and M. T. Schäfer, 49-63. Amsterdam: Amsterdam University Press.

Nold, C. 2009. Emotional cartography: Technologies of the self. *Emotional Cartography*. http://www.emotionalcartography.net.

Raessens, J. 2006. Playful identities, or the ludification of culture. *Games and Culture* (1) 1: 52-57.

—. 2014. The ludification of culture. In *Rethinking gamification*, eds. M. Fuchs, S. Fizek, P. Ruffino, and N. Schrape, 91-114. Lüneburg: meson press.

Rathenau Institute. 2017. *Eerlijk delen: Waarborgen van publieke belangen in de deeleconomie en de kluseconomie.* The Hague: Rathenau Institute.

Salen, K., and E. Zimmerman. 2004. *Rules of play: Game design fundamentals.* Cambridge, MA: The MIT Press.

Scholz, T. 2016. *Uberworked and underpaid: How workers are disrupting the digital economy.* Malden, MA: Polity Press.

Schudson, M. 1998. *The good citizen: A history of American civic life.* Cambridge, MA: Harvard University Press.

Sicart, M. 2014. *Play matters.* Cambridge, MA: The MIT Press.

Silverstone, R. 1999. *Why study the media?* Thousand Oaks, CA: SAGE.

Simons, J. 2007. *Playing the waves: Lars von Trier's game cinema.* Amsterdam: Amsterdam University Press.

Skoric, M., Q. Zhu, D. Goh, and N. Pang. 2016. Social media and citizen engagement: A meta-analytic review. *New Media & Society* 18 (9): 1817-1839.

Somers, M. 2008. *Genealogies of citizenship: Markets, statelessness, and the right to have rights.* New York: Cambridge University Press.

Stephenson, W. 1967. *The play theory of mass communication.* Chicago, IL: University of Chicago Press.

Suits, B. 1978. *The grasshopper: Games, life and utopia.* Peterborough: Broadview Press.

Sutton-Smith, B. 2001. *The ambiguity of play.* Cambridge, MA: Harvard University Press.

Tufekci, Z. 2017. *Twitter and tear gas: The power and fragility of networked protest.* New Haven, CT: Yale University Press.

Van Dijck, J., T. Poell, and M. de Waal, eds. 2018. *The platform society: Public values in a connective world.* Oxford: Oxford University Press.

Varnelis, K., ed. 2008. *Networked publics.* Cambridge, MA: The MIT Press.

Walz, S. P., and S. Deterding, eds. 2015. *The gameful world: Approaches, issues, applications.* Cambridge, MA: The MIT Press.

Zagal, J. P. 2010. *Ludoliteracy: Defining, understanding, and supporting games education.* Pittsburgh, PA: ETC Press.

Zimmerman, E. 2009. Gaming literacy: Game design as a model for literacy in the twenty-first century. In *The video game theory reader 2*, eds. B. Perron and M. J. P. Wolf, 23-31. New York: Routledge.

—. 2015. Manifesto for a ludic century. In *The gameful world: Approaches, issues, applications*, eds. S. P. Walz and S. Deterding, 19-22. Cambridge, MA: The MIT Press.

About the authors

René Glas is Assistant Professor of New Media and Digital Culture in the Department of Media and Culture Studies at Utrecht University. With a background in film and new media studies, his primary field is game studies, in which he teaches and writes about a variety of topics, including game history and culture, fan and participatory culture, cheating and other forms of deviant play, serious and pervasive games, and media comparison. Glas is a founding member of Utrecht University's Center for the Study of Digital Games and Play. His book *Battlefields of negotiation: Control, agency, and ownership in World of Warcraft* (2012) was published by Amsterdam University Press.

Sybille Lammes is Full Professor of New Media and Digital Culture at The Centre for the Arts in Society (LUCAS) at Leiden University. She has been a visiting Senior Research Fellow at The University of Manchester, and has worked as a researcher at the Centre for Interdisciplinary Methodologies at the University of Warwick, as well as the media studies departments of Utrecht University and the University of Amsterdam. Her background is in media studies and play studies, which she has always approached from an interdisciplinary angle, including cultural studies, science and technology studies, postcolonial studies, and critical geography. She is co-editor of *Playful identities: The ludification of digital media cultures* (Amsterdam University Press 2015), *Mapping time* (Manchester University Press 2018) and *The Routledge handbook of interdisciplinary research methods* (Routledge 2018). She is an ERC laureate and has been the principal investigator of numerous research projects.

Michiel de Lange is Assistant Professor in New Media Studies, Department of Media and Culture Studies, Utrecht University. He is co-founder of The Mobile City, a platform for the study of new media and urbanism, an advisor on E-culture at Mediafonds, and works as a researcher in the field of (mobile) media, urban culture, identity, and play. He is a researcher in the NWO Creative Industries funded project *The Hackable City*, about the ways digital media shape the future of city-making.

Joost Raessens is chair and Full Professor of Media Theory at Utrecht University, and scientific director of the Utrecht Center for Game Research (gameresearch.nl). His research concerns the 'ludification of culture,' focusing on games for change in relation to global climate change and refugee

and migration issues. Raessens was conference chair of the first DiGRA conference Level Up in Utrecht (digra2003.org) and leads the research project *Persuasive gaming. From theory-based design to validation and back* (persuasivegaming.nl). Among his book publications (see raessens.nl for a complete overview) are the *Handbook of computer game studies* (The MIT Press 2005), *Homo ludens 2.0: The ludic turn in media theory* (Utrecht University 2012), and *Playful identities: The ludification of digital media cultures* (Amsterdam University Press 2015).

Imar de Vries is Assistant Professor of New Media and Digital Culture in the Department of Media and Culture Studies at Utrecht University. His work primarily focuses on studying innovation discourses of wireless technologies, social media, and augmented reality. He obtained his Ph.D. in 2008 with a media-archaeological and philosophical study of how mobile phones developed to become quintessential personal communication tools, and he subsequently published on the subject in the book *Tantalisingly close: An archaeology of communication desires in discourses of mobile wireless media* (Amsterdam University Press 2012). He also published on mobile ringtones and identity performances, selfie culture, and archives in the digital age. De Vries is a member of the supervisory board of Media Lab IMPAKT and is affiliated with Media Lab SETUP.