**Leorke, D. and Owens, M. (eds.): Games and Play in the Creative, Smart and Ecological City.** Abingdon and New York, Routledge, 2021. 280 p.

Nowadays, due to the growing importance of creativity and experiences in consumption and everyday life, the role of games and play is increasing in all kinds of activities. These trends transform urban life as well: with the emerging concepts of creative, smart, sustainable cities, new methodologies and approaches appear as well. At the same time, digitalisation became nearly essential to the everyday life – at least in the developed world. In the past two decades more and more examples emerged in relation to games and game design, while the phenomenon of the gamification has received an increasing attention. These examples often seek answers to the question: how can games contribute to the governance of a city? The book of Dale Leorke and Marcus Owens offers some answers to this question and raises further research options.

The objective of the volume is to create an empirical basis that can bring together the different concepts related to the city (i.e., smart city, creative city, ecological city) and provides opportunities for further discussions. The book focuses on three comprehensive sets of urban discourses that cover the topics of the crea-

tive and cultural economies of cities, the smart and playable cities, and the ecological city itself. However, it does not discuss gamification per se, which is the use of game elements in such everyday situations that does not count as a game (Arnold, B.J. 2014).

The book is edited by Leorke and Owens, and it is a collection studies, which are integrated into three bigger parts (*The creative and cultural economies of cities, Smart and playable cities,* and *Ecological cities: sustainability and resilience*) and eleven chapters. The three parts correspond to the three main focuses of the book. (Although the first numbered chapter is Chapter 2 because the Introduction chapter counts as the first one.) The chapters include comparative case studies, theoretical and historical arguments, and critical examinations.

The *Introduction* thoroughly stages the precarious subject of smart, creative, and ecological solutions and concepts within the city, and the growing matter of games and play, the possibilities of a playable city. It presents the three main focuses of the volume and brings up the key questions. The chapter also mentions that the three highlighted discourses are not covering the whole matter; there are other crucial issues that are out of scope, such as gender issues, the class situation, etc.

Part I has the creative city in its spotlight. Hence, the studies in this section are exploring the interrelation between games and the creative city. It represents how games contribute to the creative city. However, in many cases, the critique of the creative city concept can be read, for example about how it contributed to the growing marginalisation and inequality, and some referred to it as a 'shallow' concept (*Mute* 2009; Howe, R. *et. al.* 2014). In the chapters of this part, the use of different games is presented along with how they affected city planning and the attitudes towards the city, for example through increasing tourism or changing the way the citizens see their city or neighbourhood.

The first chapter of Part I (*Games, play and playfulness in the creative city: a brief overview*) is a summary of how the concepts enlisted in the title are in an eminently deep connection with the ideas of the creative and smart city. The focus of the study is the creative city, thus, the author, Dale Leorke, often refers to Richard Florida as well as his counterparts, who criticised his theories. He emphasises that the gaming industry is one of the key elements that attract the creative class, thus, videogames have a growing importance. He also defines the concepts of games, play and playfulness, and underpins their necessity "both as drivers of economic growth in the city generally and as perceived 'counters' to the top-down, instrumental and techno-centric smart city vision" (p. 30). as Leorke says. The brief essence of the study

*Routledge Research in Sustainable Urbanism*

**GAMES AND PLAY IN THE CREATIVE, SMART AND ECOLOGICAL CITY**

Edited by
Dale Leorke and Marcus Owens
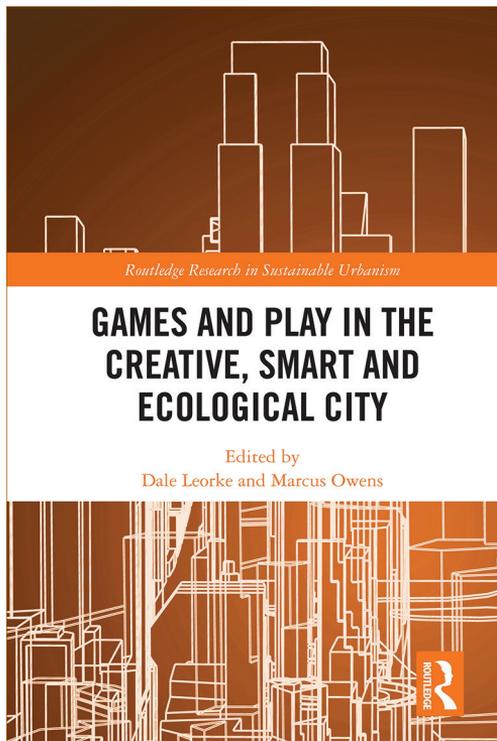
is that games make up the industry that needs creative workers, whereas play is genuinely the collective name of leisure events like festivals and street occasions, as well as informal street games, parkouring etc. Lastly, playfulness – as Leorke refers to Bernard Suits (1978) – is something that can appear anywhere in any form, such as decorating, street art, or DIY urbanism projects. Leorke outlines three ways that these terms figure into the creative city agenda, because – as he argues – the roles of games and play can be found in cities that neither label themselves as 'creative' nor use policies related to the creative city. The three ways are that games and play (i) exist as a creative industry, (ii) promote playful and playable cities; and (iii) playfully instil citizens with a creative ethos. The first refers to the growing industry of videogames that needs creative workers such as designers, programmers, artists, and scriptwriters. The second refers to the 'counter' to the top-down, techno-centric vision of the smart city" (p. 32.) as Leorke says. And the third one refers to the need for stronger citizen involvement. At the end of the article, Leorke mentions questions for further research, such as how case studies can reveal the ways games and play are incorporated into creative city agendas.

The next chapter (*Promoting Yokosuka through videogame tourism: the Sehnmue Sacred Spot Guide Map*) is a case study by Carlos Ramírez-Moreno and Dale Leorke. The authors focus on the effects of 'contents tourism' (Seaton, P. *et al.* 2017) on urban economy through the example of Yokosuka, Japan. The chapter presents the growing relevance of media-related tourism within tourism in general, i.e., when visitors travel to a locality because it was part of a movie or a video game. The authors give examples for the video game-related tourism and highlight how important it is for the Japanese tourism sector. Later they describe the computer game called *Shenmue* and the city of Yokosuka and display how the initiative of the *Shenmue Sacred Spot Guide Map* succeeded in the reinvigorating of Yokosuka's economy. With the mix of fieldwork and interviews, the authors skilfully examine the effects and the use of the pamphlet (i.e., the Guide Map), although they underline that it is roughly impossible to measure the direct impact on the economy. Nonetheless, it was a successful initiative that helped even the local boutiques situated near the popular scenes of the game to increase their customer traffic.

Chapter 4 (*Geogames for change: co-creating the future of cities with games*) is written by Alenka Poplin, Bruno de Andrade and Ítalo Sousa de Sena. Compared to the previous chapter, it provides a more geographical and more urban approach. It is another case study with two games in its focus: an analogue one, named *Geodesign Card Game*, and a digital one, named *GeoMinasCraft*. The games are included in the analysis of the phenomenon called 'geo-games for change' that suggest that serious games can contribute to a

more immerse citizen involvement into urban design and co-creation (Squire, K.D. and Jenkins, H. 2003; Michael, D. and Chen, S. 2005; Squire, K.D. and Giovanetto, L. 2005; Squire, K.D. 2006; Ratan, R. and Ritterfeld, U. 2009; Ritterfeld, U. *et al.* 2009). The authors highlight the need for a more inclusive participation that – by their opinion – can be reached through a more playful way. The experiments with the two above-mentioned games were made with children and youth between the ages of 4 and 11, and between 7 and 16. Decision-making, communication, creativity, and cooperation were in the focus. Hence, the participants had to work together and solve problems related to the landscape, e.g., restoring an old mining site or finding the best solution for an area to be improved. The experiments were recognised as successful since the children achieved the goals of the games in both cases. They could learn about their environment, while they learnt how to cooperate. The authors claim that their research is the first step towards a more inclusive and participatory planning that is also a 'fun' activity. They also argue that children underperform when it comes to city-related decision making but their ideas and problem-solving skills are valuable.

Part II concerns the concept of the smart city, and the way games and play can be instilled in it. Similarly, to the previous part, a critical way of seeing appears here. It is also presented how games could make the smart city more playable, thus, acceptable in the context of decision-making and developments that might temporarily make the inhabitants' life more difficult.

The first chapter of this part (*Urban play in practice: seven lenses exploring the sociocultural value of playable cities*) was written by Troy Innocent. In a sense, the author articulates a critique of the smart city and offers the concept of the playable city as a bottom-up, community-led alternative, in contrast to corporation-led top-down smart cities. He argues that since the urban is a complex phenomenon, the urban play is a complex one, too. He introduces seven lenses – as he refers to them – through which the different actors of a city can be understood. Although there are differences, there are overlaps as well, and with the deeper awareness of both, it would be easier to integrate the urban play into the concept of the playable city. I find it important to mention that the author tries to represent an objective point of view underlining both the benefits and detriments of the urban play and suggesting the need for further research.

Chapter 6 (*The postdigital playground: children's public play spaces in the smart city*) is a study of Bjørn Nansen and Thomas Apperley. The chapter explores the ways of how the children's play and the digital world can be connected, especially because of the growing popularity of the smart city concept. The authors use the term 'post-digitalisation' which means that the line between the non-digital and the digital is blurred (Berry, D. 2014). The chapter suggests that the digitalisation

of children's public spaces (i.e., playgrounds, public parks) as such is inevitable. It presents two case studies that are related to the idea of using mobile devices on playgrounds and public parks. The two games (*Disney Fairies Trail* and *Hybrid Play*) are mobile applications for children. In the first one, the user can catch fairies in nature through augmented reality technique, and in the meantime, they can learn about the environment, especially plants. The other game uses a special motion sensor on playground tools, and the user has to apply these tools (e.g., the swing) in order to be able to play the game on the smartphone. It is remarkable that the two games received different feedbacks, which suggests that not all ideas were useful. While the first game received positive feedback from the users, who emphasised its educative features, the other game mostly got negative feedback, which implies that the idea is not particularly useful. The authors highlight the aim for further studies on the topic, particularly because they argue that children and public spaces for children are often neglected in smart city concepts.

Chapter 7 (*Playful mobility and playable infrastructures in smart cities*) by Kyle Moore focuses on the location-based games, such as *Ingress* and *Pokémon Go*, which use geolocation. He examines the effects of such games on mobility suggesting that concept of 'situated play' is not exactly transparent. While he discovered the possibilities of a location-based game through a participatory fieldwork, he noted that mobility is not necessarily easy or available for anyone. Thus, there is a chance that these games create new forms of inequalities. However, these games still can be useful tools for exploring landscapes. Another crucial element of this chapter is the issue of the data underlying these games and how they are used, the problem of micro-transactions between the developer and the user, as well as exclusionary mechanisms concerning those who cannot afford these games and equipment. Nevertheless, location-based games are key elements for allowing the smart city to be playful as well.

The next chapter (*In praise of stupid: Games, play and ideology in the smart city*) is written by Jonathan Jae-an Crisman, Ken S. McAllister and Judd Ethan Ruggill, who scrutinise the relation of the smart city and smart game. They take an in-depth look at the attributes of the smart game and the history behind it, also the parallels between smart games and smart cities and how they should operate. They mention the dichotomy of the aspiration for designing smart cities yet operating by the ideology of the neoliberalism. However, the gamified ways for citizen involvement, for example the *Big Easy Budget Game,* which was used to collect feedback on the municipal budgeting process in New Orleans, provide the possibility of smoother processes of participation while providing data for the government and the opportunity of accepting or disregarding the citizens' opinions. The authors also mention the concepts of 'stupid games' and 'stupid cities' and set them against the concepts of being smart. In this narrative, a city is 'stupid' if it lacks a consistent agenda and smart mechanisms of management, and relies on a preliminary information-sharing infrastructure. 'Stupid games' are less complex in terms of storytelling, visuals, and responses on user behaviour. In other words, they need more efforts from the user than 'smart' games. They argue that smart cities are being made by the people who live there and not necessarily by the technology. They also argue that if the digital solutions do not provide a better and liveable environment for all the inhabitants (and not only for the rich), then these digital solutions seem 'not smart so much as short-sighted or, worse, techno-fetishistic and exploitative' (p. 160). Their conclusion for the chapter is that 'smart' is not always the better and sometimes the 'stupid' provides the proper practices for better governance.

In the last chapter of Part II (*Expanded phenomenologies: Leveraging game engines and virtual worlds in design research for the real*), Matthew Seibert writes about re-thinking landscape and the experience of landscape, linking it to the experience of the virtual world and the landscape that is being lived. He thoroughly explores the different – and not exactly geographical – definitions of the landscape, as well as how we, as humans, sense our environment not only through direct experiences but former knowledge as well. To prove this, he uses the example of Merleau-Ponty of seeing a cube only from one angle (Merleau-Ponty, M. 2012). He connects these interpretations with one's experience within the virtual world and the ways already existing knowledge can complement a primarily audio-visual sensation. In the second part of the chapter, he argues that due to the above-mentioned reasons – that are deeply detailed and explained in the article – videogame engines could provide a tool for a better city planning. To prove that he presents a survey by which he states that within a virtual world users would try to experience the environment as much as they can, even those things that they would not or could not in the real world. He ends the chapter by claiming that: 'Virtual environments do not create laws to be referenced when thinking about cities and their making. But they do create reliable and systematic knowledge for new urban futures.' (p. 182).

Part III has the idea of sustainable city in its spotlight. As an interesting element, this part not only discusses contemporary issues but examines the events of the past as well. In this part, games appear as tools to help better respond to global issues, such as the climate change, or the ecological crises of the past.

In Chapter 10 (*Modelling a critical resilience: Board games and the agonism of engagement*) Janette Kim writes about the urgency for a better public process. In her chapter, she finds it essential to focus more on climate change, especially sea-level rise, and how the resilience of societies can be improved. She argues that it is often a problem that stakeholders, the community, decision-

makers, and other actors cannot come to an agreement, yet the global climate issues are threatening everyday life. For a better process, she invented two board games that serve as tools for mediating communication and decision-making. The experiment with these games, however, have encountered difficulties. Nonetheless, the author draws attention to the contemporary problem of climate change that is neglected when it comes to city planning. On the other hand, although the problem of sea-level rise is a critical problem indeed, there are other pressing issues related to climate change, which are not mentioned by the author.

In the next chapter, Gabriele Ferri, Mattia Thibault and Judith Veenkamp write about the *Co-creation and participation for designing sustainable playable cities.* Similarly, to some of the previous chapters, this one provides a critique of the smart city concept. The authors created a comparative analysis of two artefacts of the EU Horizon 2020 project Mobility Urban Values (MUV). One is a gamified application, the MUV, the other is an air pollution visualizer device, the Asphyxia. The aim of this examination is to find alternative strategies for a more sustainable citizen engagement. They came to the conclusion that playable and sustainable ideas could complement each other for a better overall approach, while countering the smart city's excessive top-down appeal.

The last chapter is written by Marcus Owens, one of the editors of the volume. In *Designing the Whole Earth as a magic circle*, he aims to present the increasing role of games and gamification in the accelerating urbanisation of the 20th century. The focus is on planetary urbanisation, ecology, sustainability, and the relationship of these with game design. But the title of the chapter, in fact, refers to the work of Buckminster Fuller, called the World Game, and the propositions of Stewart Brand responding to the emerging crises (i.e., ecological and economic) of the post-WWII Fordist system in the 1960s. Reading this chapter, one can realise that games and gamified approaches were used already throughout history. This indicates that using game design for planning and solving not only local but even planetary issues is not a new trend emerging. Instead, it is something that only started to attract more attention in the past decade. This could be perhaps because of the growing culture of gaming, the ongoing development of games, and the increasing digitalisation of everyday life.

The volume does not have a conclusion at the end, although each part is summarised in the Introduction. Nevertheless, this book is a fine collection of different studies related to gamification. It brings up new research questions, and although it could not encompass everything – as it was mentioned at the beginning of the review –, it provides different approaches to gamified city planning and participation, and the studies can serve as starting point for future research. It also contributes to illuminating mainstream concepts of the smart, sustainable and creative city from

a new point of view – the perspective of games, play and playfulness, the phenomena that can help citizens better understand and accept decision-making, have more interest towards their environment, and take a better opportunity for their ideas to be heard. The volume is a useful reading to those who want to get acquainted with the concepts of the smart, creative, and ecological city while discovering innovative solutions for city planning. Also, it is most helpful for further studies on gamification in urban planning.

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