



Editorial: Urban Play and the Playable City: A Critical Perspective

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Editorial on the Research Topic

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INTRODUCTION

Cities by their very nature are utilitarian creations built to support both the physical and symbolic needs of the communities that built and inhabit them and are capable of representing the societies and cultures that they host. However, the nature of the urban environment and its affordances is such that it easily invites play in both its construction (architecture) and the different kinds of interactions that take place within its confines. While cities, by design, offer opportunities for structured and unstructured play in the playgrounds, ball courts, and game boards constructed by municipalities, at the same time, they often host more spontaneous games and playful activities that repurpose or harness the city infrastructure and bend it to their own—playful—logic. These have a rather wide range. They include traditional games, such as hide and seek, treasure hunting, or tag, that harness the physical features of the immediate surroundings of the players and that can be augmented through technology with applications such as *Picoo* (Picoo, 2021) or within larger projects such as in geocaching (O'Hara, 2008).

They also include playful activities that are oriented toward the community inhabiting such spaces and related to forms of territorialization, such as *Parkour* (Ameel and Tani, 2012), of political activism, as in flash mobs, and of interaction with the community through games such as *Massively Multiplayer Soba*, which builds on the concept of a treasure hunt to challenge players to engage and interact with the local community in a particular area of a city (Flanagan, 2010). They also encompass location-based games, that very often take place exactly in urban spaces, such as *Pokémon Go*, and that use the entire city as their playground (Hjorth and Richardson, 2017).

Apart from entertainment, these forms of play can serve multiple purposes. During the first phase of social distancing and quarantine due to the COVID-19 pandemic, for example, urban play became an important factor of resilience, with playful activities concentrating on spaces such as windows, balconies, and rooftops (Thibault and Baer, 2021).

Urban play can even go beyond the use of the spaces of the city and include their design, offering a possibility to discuss and plan through stories and roleplay, issues that matter to local communities (Schouten et al., 2019). A noteworthy example is *Play the City* (Tan, 2017) a roleplaying game for collaborative decision-making on new housing projects, infrastructure, or social cohesion amongst others (Schouten et al., 2017). What all these games and activities have in common is that they happen outside the traditional cultural boundaries reserved to play, and creatively "invade" new spaces—both physical and digital. Recently, the notion of the playable city has emerged as a counterpoint to the "smart city" whereby the array of sensors and actuators that enable smart city infrastructure can be harnessed to create novel interactions and playful experiences within the

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Chisik Y, Nijholt A, Schouten B and Thibault M (2022) Editorial: Urban Play and the Playable City: A Critical Perspective. Front. Comput. Sci. 3:806494. doi: 10.3389/fcomp.2021.806494 city—by lending an ear to trees, giving a voice to park benches, stairs, and garbage cans, or reviving the shadows that pass in the night—thereby enabling a host of new interactions and experiences and raising new challenges and concerns about distraction and duplicity (Nijholt, 2016, 2019).

In this Research Topic, we compare and contrast the various forms of play that occur in urban environments or are dedicated to their design and planning, with the notion of the playable city. In a playable city, the sensors, actuators, and digital communication networks that form the backbone of smart city infrastructure are used to create novel interfaces and interventions intended to inject fun and playfulness into the urban environment, both as a simple source of pleasure and as a means of facilitating and fostering urban and social interactions.

CONTRIBUTIONS

This Research Topic will include nine peer-reviewed papers of which five are dedicated to original research, two are perspectives, one is a comparative analysis, and the last is an opinion piece. These articles are collectively dedicated to various themes and perspectives. The contributions focus on different forms of play (ranging from playing cards to parkour) and technologies (including AR, smart benches, and transportation) and engage the concept of playable cities from different angles.

Sousa explores the use of board game mechanics as a means of sparking discussion and ideation in urban planning co-design sessions. The paper describes the rationale behind the approach and the game design process through which the author and a group of students at the University of Coimbra shaped an initial idea into a collaborative design methodology that can be adapted to the specific needs of disparate design inquiries and planning scenarios.

In their paper Slingerland et al. define a framework for inclusive and participatory city-making from a bottom-up perspective aligning all possible stakeholders. The framework is based on several interviews with community officers and a real case of a new housing project called *Bouwlust* (Desire to Build). It emphasizes playfulness, community building, inclusiveness, and sustainability. To set design requirements for participatory city-making projects it suggests and defines four activities: connecting with the neighborhood, identifying key stakeholders, data gathering and analysis, and reflection.

Innocent and Stevens argue in an opinion paper, that the COVID-19 pandemic created an opportunity to reimagine city life, the function of public spaces, and urban planning policies. They give examples of urban play and recreational activities during the pandemic, reflective walking and the rediscovery of local neighborhoods, and public art projects that comply with social distancing constraints. Creativity and social life were challenged and were able to adapt to such constraints. Taking Melbourne (Australia) as a model, they posit that responses to COVID-19 should lead to the transforming of public spaces and the re-allocation of urban spaces for play, socialization, and social well-being.

Chew et al. explore the notion of play as place-making by examining the role smart street furniture can play in the design and evolution of future urban landscapes. By using smart benches as a benchmark, they speculate on how technology (playful and otherwise) can be used to not only augment the experiences of those living in urban environments but also to augment the fabric of the city itself by imbuing what until now have been static elements with life and agency of their own.

Bedö introduces a public transport design project that explores similarities between autonomous buses and their users. In this (extension of) a Catch the Bus project, the perspective of an autonomous bus, that is, a non-human, is introduced. The project aims at exploring how, playfully, people, traffic, and autonomous busses engage with each other. It is an exploratory design research approach that decenters from the human perspective and instead focuses on the (non-human) autonomous bus's perspective. What is it like to navigate traffic as a bus? The author concludes that the combination of playfulness, merging the real and fictive, and shifting away from one's perspective to an otherwise inaccessible perspective, is the basis of the epistemological export for design exploration.

In her perspective piece, Seixas looks at studies on the use of urban play for promoting the right to the city with a critical eye. The author offers a short review of studies on urban play that share the idea that play has an intrinsic social value. Confronting this idea with the radical work of Henri Lefebvre, Seixas argues that not all forms of play are necessarily beneficial for citizens and communities and contends that some could instead be used to promote commercialized forms of leisure or to increase urban entrepreneurialism. In the conclusion, the author then suggests that, while the right to play is indeed important, urban play advocates should also explore the citizens' right *not* to play in the city.

Mast et al. contributed a paper on the positive effects of so-called Augmented Play Spaces, public environments for playful interaction within the city, through a Participant Journey Map consisting of interviews of experts and previous design projects as well as research. The PJM focuses on six transitional play states: "Transit," "Awareness," "Interest," "Intention to participate," "Participation/Play," and "Intention to stop." The Participant Journey Map provides insight into people's engagement with interactive augmented play spaces and the influential factors facilitating their journey, including design recommendations on how to improve the engagement with such interactive playgrounds.

Oduor and Perälä, present their pilot study for a location-based urban game tested in the city of Oulu, Finland which aimed to promote physical activity in urban public areas through the use of Augmented Reality (AR). The game encouraged players to bike and walk across Oulu to 30 different checkpoints where AR instructions would guide them in a workout session with the public facilities available in the city. A follow-up questionnaire helped the authors to identify the strengths of their app, as well as informed the next steps of development. The conclusions highlight how such experimentations can be useful to explore how to combine the built environment with AR technology to encourage urban exploration, interactions, and active mobility.

In a perspective article by Sherman et al., we find an example of speculative design (design fiction) (Dunne and Raby, 2013). A speculative rideshare design is proposed that in addition to features that aim at trust and efficiency (route optimization, communication between autonomous vehicles) has an 'Adventure Mode' that rather aims at providing an entertaining rideshare experience. In this mode, the rider can enter some preferences but the journey and destination will be given a playful interpretation. This offers a way of moving through the city, seeing unexpected places, having chance encounters with strangers, and adding playability to the smart city.

CONCLUSIONS

The picture emerging from the contributions to this Research Topic, with its wide range and different approaches, is one that highlights the potential and pervasiveness of play and games in contemporary cities. While play has always been an essential part of urban life, our contributors show how the technological development within the urban environment appears to go hand in hand with playful uses and "misuses" of technology for play's sake. If the urban environment is becoming increasingly filled with sensors and actuators, AI, and augmentations, all these are susceptible to be reappropriated, overturned, and repurposed to realize their playful potential.

In parallel, our contributors also make a good case for a contemporary social understanding of play that perceives it as a possible response to many of the issues related to city design, management, and life. Several aspects of urban existence are being "gamified" starting with planning and including mobility and logistics as well as social well-being and community building.

As the world becomes ever more urbanized, cities incorporate more and more technological novelties, and play becomes increasingly more influential in our culture, research on playable cities is becoming more and more relevant. And as the challenges faced by cities seem to become greater with time, the need for novel, critical, and creating approaches on how we could use the potential of play to improve urban life, foster sustainability, consolidate resilient and inclusive communities becomes even more urgent. We hope the ideas and methods presented in this volume will spark further thoughts and translate into novel actions by urban dwellers, designers, planners, and policymakers to the benefit of us all.

AUTHOR CONTRIBUTIONS

All authors contributed equally to the article and approved the submitted version.

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