

COMMON URBAN GAME SPACE

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Urban Gamification Tools and Their Applications

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shared vision-building of Publicity

ABSTRACT

The aim of this dissertation, titled *The Common Urban Game Space*, is to promote the use of gamification in urban planning in Hungary, in particular to expand the urban planning toolkit with practices of „common platforms” supporting the initiation of dialogues between urban actors. By enriching the methodology used in public participatory planning with gamification, new perspectives and depths are opened for urban planning and for urban futures research. Gamified tools can effectively address and engage various social groups, empower stakeholders to contribute to the dialogue, and thereby enable the mapping of their relationship to their neighborhood, as well as the development of multivariate scenarios based on local experiences and needs.

Over the past decades, European urban systems have undergone significant changes due to crises, social upheavals and technological „explosions”, all of which with an impact on the planning processes. In this decision-making environment, characterized by technological and social transformations, and a general lack of discussion, it is necessary to maintain a continuous dialogue among urban stakeholders, in order to gather and to share more knowledge about the city, to shed more light on the problems that currently emerge, and to respond more resiliently to change in the turbulent surrounding environment. However, the current decision-making tools used in urban planning struggle to keep track of the different capacity requirements arising from rapidly evolving trends, and also to uncover the ever-changing expectations, and therefore fails to provide an adequate [operational] background for informed decision making.

In Hungary, public participatory planning is not yet an integral part of the organizational culture; for the laymen, contribution to urban [decision making] processes appears difficult and formalized. Therefore, I was looking for the tools to meaningfully involve stakeholders in each urban process, in order to develop a set of shared knowledge, collective values and visions that form the foundation of the community's future.

My research is based on the interactions between its theoretical/scientific results, and the feedback from my specific practical experience. In the theoretical part of the dissertation, I established the urban-social and future studies foundations of public participatory planning, and examined the professional and technical background of gamification, as well as its tools used in practice for implementing the positive impacts of games in urban planning. In the practical part of the dissertation, I describe three novel gamified tools and related methodologies that I have developed. The *Pozitive Box*, *Publicity*, and *Be Your Space!* tools were tested in a total of 19 events, involving more than 400 participants, and were successfully applied in offline spaces within public participatory planning processes or educational environments. These tools can be used by municipalities, architects, facilitators, civil organizations or urban activators involved in the decision-making/planning space, adapted to the specific project, at different stages of the urban planning or development processes, in particular when defining urban visions.

keywords: urban gamification, gameful urban planning, common urban game space, urban planning toolkit, gamified tools, public participatory planning.



common city [public participatory planning of Szeszgyár square in the 8th district of Budapest, 2023]

THESIS 1

COMMON CITY

Innovative transdisciplinary techniques are needed in urban planning and development tools to enhance the chances of social dialogue and to help respond to intercultural challenges, in order to promote social sustainability.

To identify the complex problems emerging in urban spaces, it is essential to develop novel ways of understanding that integrate both theoretical and practical methods from multiple disciplines while also incorporating extra-scientific perspectives, such as tacit knowledge. The urban planning solutions that respond to these challenges can be elaborated through the collaboration of various urban actors, with mutual and cumulative knowledge-building. This requires cooperation skills, dialogues, value identification, and shared platforms in real-world problem situations. Strengthening the cohesion among scientific, planner, and non-designer actors is crucial, as sustainable urban interventions necessitate collaborations across different social and cultural groups to achieve the common goal – a COMMON CITY.



game space [targeted consultation with Publicity in Nyírbátor, 2024]

THESIS 2

GAME SPACE

Due to the inherent characteristics of games, gamification in the 21st century provides a common platform for bridging intercultural differences, thereby increasing the effectiveness of social dialogue.

Today's specialized, professional approaches often make communication within even a single field challenging. However, no single discipline can be held solely responsible for solving shared problems. Therefore, it is essential to establish a common language and platform where we can collectively perceive various needs and interests without relying on specialized jargon, where we can develop alternatives while recognizing and practicing our individual resources and abilities. The universal language of games and their impact on fundamental human motivations could help bridge differences in cultures, age groups, needs, interests, opportunities, and capabilities, thereby facilitating the setting of optimal challenges, collective thinking, and action.



urban gamification [Let's plan Jázmin Square Together! 2023]

THESIS 3

URBAN

GAMIFICATION

Gamification in public participatory planning is suitable for fostering dialogue through gamified elements, increasing the attractiveness of participation, ensuring equal conditions for participants to express their opinions, evoking a design mindset, and bridging social or cultural differences between city stakeholders, designers, and residents.

The application of gamified tools is an extremely valuable method in public participatory planning. The eye-catching, colorful, and varied gameful elements enhance the attractiveness of participation, as they capture attention, promote the topic in advance, and create an informal atmosphere. This can encourage people to take the initiative, thereby fostering dialogue among urban stakeholders. These tools help ensure equal conditions for participants to express their opinions, as the gamified elements and visual cues translate questions to a more understandable level of association, and the game rules apply equally to all participants. The abstract elements and game situations presented by the tools contribute to evoking a design mindset, as they distance the questions from reality just enough for participants to represent their own values without fear. They bridge social or cultural differences, as all participants are able to express their opinions through the gamified tools. The game objects also display results in real-time, which increases transparency.

THESIS 4

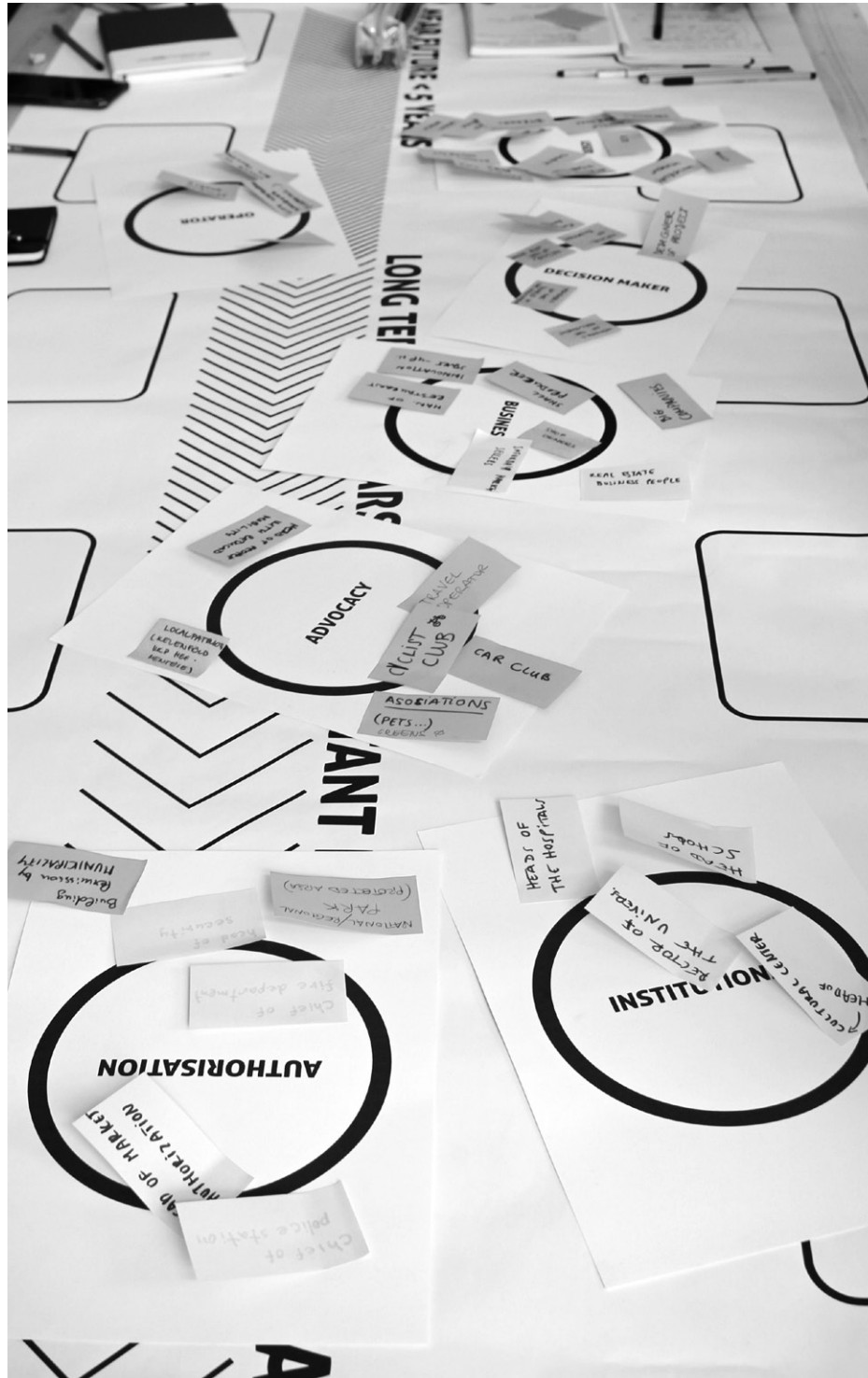
POSITIVE BOX

In urban planning, gamification aids in capturing the attention of non-professionals/non-designers, engaging and empowering them to connect, and accessing the initiation of collaborative thinking.

The Positive Box is an installation designed to facilitate dialogue on a professional topic with city users, whether in a public space or an exhibition setting. This gamified installation provides opportunities ranging from prompting reflection and critical, creative environmental perception to formulating suggestions. It creates a common platform for discussing professional issues across all age groups.



Positive Box at the Bus Terminal of Budaörs [2022]



Publicity with the role circles after gathering stakeholders [PLAYACT international workshop, 2023]

THESIS 5 PUBLICITY

Gamified tools are suitable for shifting participants from their usual roles in the initial stages of urban development, thereby facilitating the alignment of individual interests and increasing social acceptance.

Publicity is a transdisciplinary gamified tool that leverages game mechanics to provide insights into the fields of urban planning, public participatory planning, and futures studies. In Publicity, participants simulate urban characters different from their own roles and collaboratively develop a scheduled strategy to achieve a shared urban vision based on their intervention ideas. The game environment dissolves real-life hierarchies and facilitates the temporary suspension of entrenched interests, values, and needs through individual experiences, potentially opening up new perspectives in urban development projects, alleviating urban conflicts, or advancing towards common global challenges.



Be Your Space! / Space Character [Let's plan Jázmin Square Together! 2023]

THESIS 6

BE YOUR SPACE!

Gamification empowers and enables participants to propose valuable suggestions within a design concept during the urban public participatory planning process, thereby aiding in the creation or enhancement of person-environment congruence.

„Be Your Space!“ is a technique that enables participants to present individual integration concepts for an area they are familiar with during public dialogues in participatory planning. The method operates with 5 game stations containing specific urban gamification tools, which follow each other in increasing complexity. Each station stimulates different senses and evokes the use of various skills to solve the tasks. The gameful planning tools assist participants in expressing their spatial usage patterns, invoking their creative thinking, and identifying their preferences relevant for urban planning. Additionally, they help create a more informal atmosphere and record real-time responses. From the gathered individual preferences, a planning-preparatory document can be compiled, showcasing alternatives that include individual spatial usage habits, needs, and expectations, thereby contributing to improved person-environment congruence in the development.

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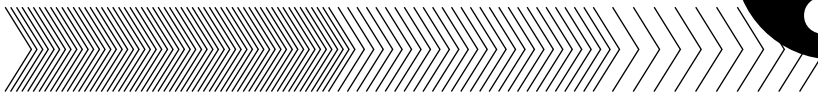
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