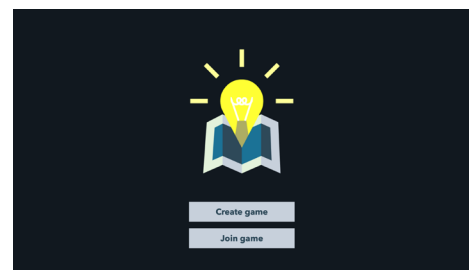
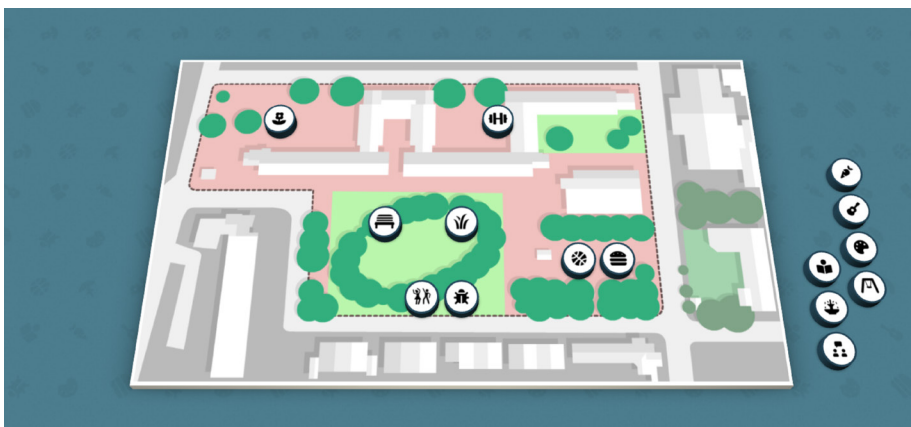
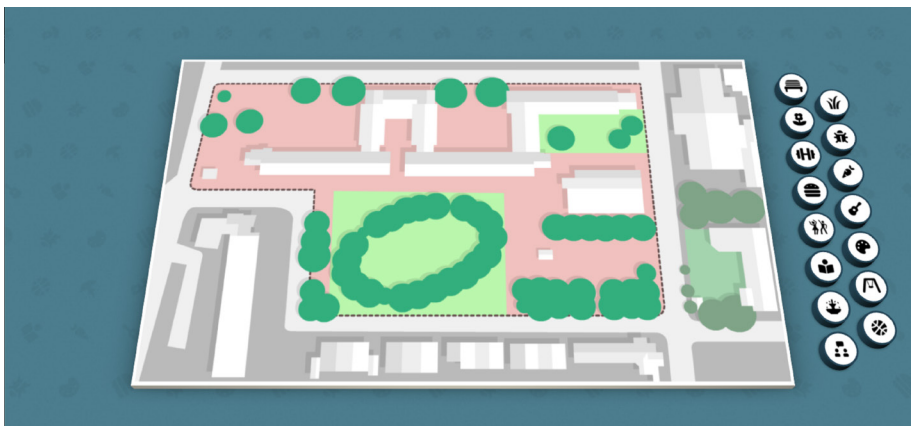
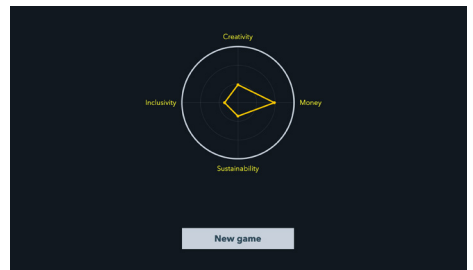
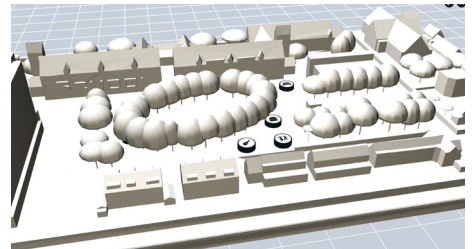
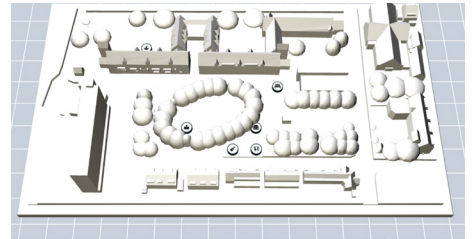


"Square Builders" Tabletop

immersive tech for public space co-design



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“Square Builders Tabletop”: immersive tech for public space co-design

Background

The “Square Builders” board (tabletop) game is originally made for a co-design workshop in the Rotterdam South’s neighbourhood Tarwewijk. The subject of “Square Builders” is an elementary school square. As the school and the neighbourhood grow in their size, the existing square space became too small, with outdated street furniture, and underutilized green spaces. In order to better understand and service the needs of schoolchildren and the citizens of the neighbourhood, the Municipality initiated a public space co-design process. The results of this process are to be used for a professional design competition for the new design of the square.

The “Square Builders” game serves as a consultation and co-design tool in this process, to bridge the understanding gap between the actuals “users” (schoolchildren) and professional designers and planners. The 2D image of the square is used as the board, or the “playing field” where different ideas about the future redesign of the space could be expressed. The expression of the ideas is guided by crafted gameplay or “engagement rules”: the players are grouped in teams, each team has a mission – a description of certain social and spatial quality that is expected from a future redesign – and a wide set of pre-defined physical programme (e.g. benches, flower gardens, sport fields) represented as tokens to “build the new square”.

“Square Builders” Tabletop so far

The original version of the Square Builders, in its (tabletop) analogue form, has several limitations: it’s played in a workshop (physical) setting, with a fixed amount of participants, and needs additional post-production time in order to collect, understand and interpret the expressed ideas in a way that they can be used as quality design input. It is aimed for a specific group of players / respondents (in this case schoolchildren) and needs to be re-adjusted for other type of co-design stakeholders.

Having this in mind, we aim to create a tool of a more value and efficiency. We believe that using certain digital immersive tools and approaches, (“immersive tech”) many of the described shortcomings can be solved.

So far, we have made a small “Square Builders” digital web-based game prototype, based on the analogue version dynamics. Some of the initial game rules have been adapted from its original version, in order to follow the digital “logic”, and to be able to set up a co-design process without the help of a moderator (as in the workshop version). The prototype offers 2D and 3D views of the square, and can be played with several teams online, simultaneously. The prototype can be found here: <https://pleinbouwers.herokuapp.com>

Digital version may lack the directness and social interaction of a physical workshop, but offers a lot more of post-production possibilities, analytics, and wider outreach by being able to engage more participants, online. By enabling this online engagement, the “Square Builders” game can serve as a part of the existing participation trajectories, and extend the involvement of citizens in public space planning over a longer period of time (as opposite to the one-time physical workshops). Depending of the goal of interaction, the digital gameplay can be varied and adapted whether it is a simple consultation, education or training tool.

Research questions

For the next step of upscaling the prototype, we would like to research the following options:

- Use of VR: ideally, the Square Builders’ 3D model could serve as VR surrounding. The tokens can be less abstract and more depicting of real urban infrastructure
- Use of “social” VR: can we build-in the “virtual stakeholder personae” in the VR, (through VR avatars) to guide the actual player in re-designing the square?
- Use of web: how can we combine the digital tabletop version with online civic participation web platforms?

About the Square Builders creative team

Blok74 Urban Simulations / Urban Communications is a Dutch-Serbian urban design office active in the field of applied urban planning simulations for co-design processes. We use gamification and interactivity as main drivers of our analogue and digital simulations. We believe in creating simple, engaging tools for scenario planning, participative urbanism and citizens’ science.