
Designing Outdoor Playgrounds for Increased Civic Engagement

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ABSTRACT

This paper discusses the design of playgrounds in the city to create places in the urban space for citizens to interact and collaborate. The research is performed in The Hague and Rotterdam, where municipalities envision cities to become safer when more people are outside and interact. The specific contexts of different neighbourhoods is taken into account to understand what kind of playgrounds would be appropriate to facilitate social interaction and neighbourhood exploration. Several participatory design workshops have taken place with children (Rotterdam) and adults (The Hague) that led to initial insights on how playfulness can stimulate citizens to become active in the outdoor space. Future workshops have been scheduled to evaluate the insights found so far.

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CHI '19, May 4-9, 2019, Glasgow, UK

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ACM ISBN 978-1-4503-9999-9/18/06...\$15.00

<https://doi.org/10.1145/1122445.1122456>

KEYWORDS

Playgrounds, The Hague, Rotterdam, citizen participation

INTRODUCTION

Play and playfulness have gained momentum in Human-Computer Interaction (HCI) research as a mean for behavioural change. The Playable city [10] has been proposed as an alternative approach to a technology-driven top-down smart city [6]. Several designs have already been explored to enable the playable city, such as the Jokebox [2], the Vote as You Go system [9], or more generally location-based games [1, 4], interactive art installations [11], or public screens used by residents to discuss improvements for the city [3, 5]. By creating these playgrounds as explicit places for citizens to socially interact and to become involved with the direct environment, designers can contribute to the development of the playable city.

Although, as the examples show, quite some work has been done in this field, it remains challenging to know which type of playground design is effective in a certain context. Considering the Jokebox [2], designers need to understand what types of shared interactions and resulting jokes would be appropriate for the people using it. These might vary amongst areas, due to culture, social practices or simply the personal interest of individual people. Our research conducted in the Dutch cities Rotterdam and The Hague aims to understand the design space for creating playgrounds in the city where citizens can interact and collaborate to increase the liveability and safety of the neighbourhoods.

CURRENT WORK ON PLAYGROUND DESIGN

Our current work has focused itself within specific neighbourhoods in The Hague and Rotterdam, aiming to facilitate outdoor playful activities that will lead to more engaged citizens and safer neighbourhoods. Both municipalities of these cities envision that increased outdoor activities, in other words more people on the street that talk to each other, will lead to less criminal activities such as drug abuse. Research done by Erete [7] has already indicated that criminals are less inclined to burglarise a home when they observe neighbours talking to each other on the streets. While The Hague is focused on engaging adult citizens, Rotterdam has put its focus on engaging children and youngsters, particularly because relatively many young people live in this city.

Research objectives

Although the research focuses on different age groups, the overall objective is to understand how the urban space can be made more interesting for people to engage with it. These spaces are designed to become *playgrounds*, virtual and physical environments where citizens can engage with their local community through interaction and collaboration [12]. As suggested before, requirements

or guidelines for designing such playgrounds will differ depending on context and target group. Consequently, a participatory design approach is employed to allow citizens of the local study areas to come up with their own playground designs and reflect on them in research workshops. These engagements with local stakeholders reveal how effective playgrounds can be designed and which specific context characteristics should be taken into account.

Playground designs in The Hague

Two workshops with in total 28 citizens attending have been conducted to explore which locations would be appropriate playgrounds and what kind of information citizens would like to share about these locations or on the neighbourhood in general, to make the environment more engaging. Three initial design requirements and two proposals for playground designs were distilled from the results, more extensively described in [12].

Following up on these insights, seven citizens participated in two play sessions. The researchers designed five challenges that citizens could play at specific locations in their neighbourhood. The challenges could be solved by talking to people on the street or sharing stories about the neighbourhood. The challenges were designed to support citizens exploring new places and meeting new people in a playful way. During the second session, citizens would brainstorm ideas for challenges themselves. Using several creative techniques and probes, such as maps of the local areas, citizens were stimulated to share their personal neighbourhood experiences and translate these into challenges.

Albeit the data analysis is currently being executed, our initial observations and notes indicate that citizens were engaged and enjoyed playing the challenges during the first play session. In the debrief discussion, they all mentioned to want to play again, especially when the weather conditions would be inviting to go out. They enjoyed to meet new people and to learn about activities that take place in their neighbourhood, they were not aware of before. During the second session, citizens came up with challenges that would allow their neighbours to learn something about a particular place. For example, a remarkable statue that has a specific meaning not everybody knows about, or discovering the meaning of names of streets.

Playground designs in Rotterdam

In Rotterdam, one workshop was held with 45 children (ages 11-13), to explore how specific places in the neighbourhood can be made more interesting for outdoor play and exploration. One week prior to the workshop, the researchers visited the school to explain the workshop aim to the children. Booklets with questions on outdoor play in the neighbourhood were handed out, to invite the children to already think about this topic. One week later, the children went out in groups of 3-5 and two adult supervisors to explore the neighbourhood and come up with ideas to make it more interesting.

The groups walked three different routes through the neighbourhood and stopped at specific locations to brainstorm about ideas. Each child was assigned a specific role, such as navigating the map, writing or drawing the ideas, reporting on the discussions or taking photographs of the process. The total session took about one hour. Each route was walked by three different groups.

The groups came up with 50 ideas in total for 9 different locations. They thought about physical activities to make locations more interesting, such as running next to the metro to see if you would be faster than it. They also came up with quiz challenges for which children would need to find the answer to a question about the location, for example what the meaning of a local statue is or what the factory at the other side of the street is producing. To find the answer, children need to talk to people around or find street signs that provide the information. Finally, the groups came up with a competition to create something to make the location more interesting. For instance, a poem about the neighbourhood or a redesign for a playground to make it more fun to play. These creations could then be evaluated by other children to choose the winner.

FUTURE WORK ON PLAYGROUND DESIGN AND OUTDOOR PLAY

Both case studies currently described are still on-going and next steps have been planned. In The Hague, local professionals such as police officers or community workers will be invited to investigate their perspective on how to make the city more playful and to understand their role in this. In addition, the ideas generated by the participants of the workshop will be prototyped and evaluated in a play session.

The challenges designed by the children in Rotterdam are currently prototyped and integrated in a mobile game [8], so that these can be evaluated with the children again. A next step is to execute similar workshops and play sessions with teenagers, for which collaboration with local stakeholders is currently being set up.

INTEREST FOR DESIGNING FOR OUTDOOR PLAY WORKSHOP

We are very interested to participate in the Designing for Outdoor Play workshop at CHI, because our research objectives align with the motivations of the workshop organisers expressed in the call for participation. During our research activities, we have also experienced several challenges which we would like to discuss with other researchers. We hope to learn novel ways of making the necessary trade-offs for this research “in the wild” and learn from ways other researchers deal with the challenges in this type of research. Finally, we are excited to meet other researchers who are also passionate about making the outdoor space more playful and love to get inspired by their ways of doing this.

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