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Join the Park! Exploring Opportunities to Lower the Participation Divide in Park Communities

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ABSTRACT

The current work explores the *participation divide* that is oftentimes at play within local citizen communities. The studied case illustrates a common situation where the majority of local citizens does not participate in public space improvement and maintenance activities organised by local community activists. The presented research involved semi-structured interviews supported by interactive service design probes. It has led to two strategies for stimulating community participation, namely 1) increasing transparency around community activities, and 2) embedding community participation in citizens' daily social practices.

CCS CONCEPTS

• Human-centered computing \rightarrow Interaction design.

KEYWORDS

Local communities, citizen participation, design strategies

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1 INTRODUCTION

Cities increasingly experiment with new participation policies that aim to stimulate citizens to organise themselves and take action in improving their own social and physical habitats. Citizens, who are taking direct control and responsibility for their own neighbourhoods, are referred to as city makers, co-designing their own city [9]. Initiatives from these city makers usually grow from idealism and bring together highly motivated citizens addressing 'hot' local topics. Although being successful in reaching short term-goals, these local initiatives tend to fail at finding a way to sustain themselves and to grow into mature and flourishing communities [37]. While making an impact on city-level in their early stages [15], initiatives struggle to attract a broader local community, and find

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© 2019 Copyright held by the owner/author(s). Publication rights licensed to ACM. ACM ISBN 978-1-4503-7162-9/19/06...\$15.00 https://doi.org/10.1145/3328320.3328382 difficulties to sustain their influence on the long run [34]. Differently put, the participation potential of local communities is not fully exploited because a large group of citizens remains inactive. Motivated citizens take on the role as catalysts in this context by encouraging engaged citizens to become more active [2, 16, 31]. This also increases the contrast between active and passive citizens, and contributes to a so-called *participation divide*.

Voida et al. [41] suggest that the reason for citizens not to be active is that they do not experience to be part of their local community, despite taking a passive part in it. Citizens that do perceive themselves as part of the community sometimes still remain inactive because they perceive their efforts are not effective. They consider their skills limited to directly influence decisions [7, 8], are concerned with underlying politics at play (such as hidden goals of different actors) [24], or simply feel not heard by their government [6]. In other words, passive citizens are not necessarily uninterested in participating, but are usually unaware of their possibilities, and are oftentimes not convinced that their efforts can effectively contribute to the communities' ambitions.

In the current work, we elaborate upon this participation divide by studying one park initiative in detail. Our aim is to identify design strategies to lower thresholds to active citizenship. The next section describes the context of the selected public park and the corresponding participation culture. Afterwards, we review prior research on stimulating community participation and synthesise the insights into three aspects of community participation that are used to inform the further exploration of the participation divide. After explaining the research method used to investigate the participation divide within these communities, our findings are presented. These inform two design strategies for lowering the participation divide, discussed and concluded in the final sections.

2 CONTEXT

The context of study is Rotterdam, one of the largest Dutch cities. Here, the Municipality uses a broad array of participation policies varying from financial support to stimulate either low threshold social citizen initiatives that ask for less than \in 10k and are granted on a neighbourhood level [28] or more mature proposals requesting over \in 10k that are further developed in co-creation through citylab010, a city platform for social innovation enabling citizens to co-create better solutions for local challenges [33], towards the Right to Challenge (R2C) [39], a policy requiring more advanced citizen participation skills. Using the R2C, citizens take over tasks from the municipality if they think these can be leaner, better, cheaper, or otherwise differently performed. Residents will perform a service or task entirely themselves and are also responsible for this, or residents make a proposal for the service or task to be performed.

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differently, and seek support in the neighbourhood to challenge the municipality. The role of the municipality is to consult residents about how things can be improved and to make agreements with them.



Figure 1: Dakpark (image 1) and the four identified roles: park coordinator and park committee members (image 2), park members (image 3), and park users (image 4).

With its one kilometre length, The Dakpark in Rotterdam is not only the largest public park on a roof in Europe, it is also a successful application of the R2C policy. Residents from the district Bospolder Tussendijken have worked for 14 years to realise this park. When the Dakpark was completed in 2013, the Dakpark foundation received a budget for the self-management of the park and organising the participation of the residents of the neighbourhood. A part-time coordinator has been hired to realise the agreed upon duties and responsibilities between the municipality and the Dakpark foundation. This coordinator also has been the driving force behind many activities and the main contact for the large number of active residents in the park.

Figure 1¹ and 2 show four types of roles identified in park initiatives in Rotterdam based on their type of involvement [35]. The park coordinator acts as the main spokesperson of the community, and is oftentimes a key-figure in the community, who has a large network and experience with setting up citizen initiatives. Park committee members take a leading organisational role and arrange activities to bring citizens together in the park, such as gardening or park feasts. Park members are citizens, living close to the park, who are also active members of the park community. They participate in organised activities and actively contribute to tasks that need to be performed to maintain the park. As opposed to park members, park users are people who visit the park, but are not involved in any volunteering activity in the community. Figure 2 shows that park users being engaged in the park by actively using it, are not necessarily engaged in the park community. Differently put: they do not contribute to park maintenance activities. Currently, various digital means (such as social media) are used to promote the Dakpark and to attract new volunteers to join the park community. Nonetheless, the Dakpark community keeps struggling to motivate current

park users to become more active in (mainly) gardening-related activities, and consequently, a small and active elite is ruling the park community, gaining more and more citizenship skills, which eventually manifests a participation divide.



Figure 2: Park users visit the park, but are not engaged in the park community. The park community members may be less engaged in using the park, but are more active in its organisation and maintenance.

3 ASPECTS OF COMMUNITY PARTICIPATION

Prior research [1, 5, 22, 23, 26, 38, 40] has extensively discussed how communities can be more open to newcomers and sustain participation. In this context, McMillan and Chavis [25] describe how factors, such as personal investment, influence, and shared emotional connection are underlying psychological mechanisms that lead to achieving a sense of community. Others defined specific activities, such as finding a shared identity, as being related to a sense of community [42]. The following three aspects of community participation summarise and frame the fundamental qualities that a local citizen community needs to exhibit in order to grow.

Mutual exchange describes the reciprocity between community members: feeling that you get something in return for your work. Citizens in local communities collaborate to achieve shared goals and values. To sustain participation, contributing to the common good should be properly balanced with activities related to intrinsic motivation [19]. Obligation and reciprocity should be balanced [42]. Each citizen is motivated to make impact distinctively, due to individual preferences [2, 19]. Citizens need to see that their individual efforts are a contribution to the larger whole [29], and that they get something in return.

Shared ownership means that community members feel responsible for their initiative. Local communities are often initiated from a wish of improving something in the neighbourhood or from an idealistic view on a certain topic. For example, citizens wish to take collective action in dealing with liveability issues [21, 24], report issues in the physical environment of public concern [6, 11, 19], address alternative approaches to contemporary ways of doing things [19], or are driven by a belief for universal human rights currently not available for the community [2]. These various motivations of citizens to start or participate in an initiative

¹Image sources: image 1 tinyurl.com/y5t6apcq; image 2 author's own; image 3 www.facebook.com/pg/dakpark/photos/?tab=albums; image 4 www.dakparkrotterdam.nl/agenda/bootcamp-met-tino/2017-05-10/

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cause citizens to make investments and become psychologically attached to the community, meaning that they develop a feeling of ownership towards it [4, 30].

Self-organisation concerns citizens feeling involved in organising the initiative. Citizens need to be able to find their role within the network of the community, and understand that all individuals are effectively working together within the community [3]. By celebrating achievements, community members are motivated to continue their work [2]. Citizens realise their efforts are effective when policy makers and representatives of community organisations show interest [11, 21]. For citizens to continue their participation, they need to experience their contribution is important and appreciated, and effectively contributes to the community's mission.

These three aspects of community participation are interdependent: if one of them decreases, it will affect the others. For example, when citizens do not experience mutual exchange, they will also feel less ownership towards the initiative and not involved in the organisation. These aspects are considered in our further exploration of the participation divide which is present in local communities.

4 METHOD

The research was performed using two design probes [13] as design interventions aiming for eliciting the hinders experienced by park users in being engaged in the park communities' activities. The paper-based probes represented interactive technology prototypes, for citizens to easily relate to while following the current digital way the park community presents itself. The design of the selected two probes followed from several ideation activities on how park users can become more engaged in the park community.

One of the thresholds for participation is that citizens are unaware of the ways they can participate. Therefore, the first probe was an A3 paper notice board that was placed in the park, containing different cards explaining the roles citizens could expect in the park community. Each role card contained information about the function: a two-sentence explanation, collaboration with other roles, learning opportunities, and what tasks this role entails. Discussing this probe with park users allowed to explore whether by understanding the roles, citizens would better understand the options of participating in the park, and be more inclined to do so.

The second probe allowed residents to subscribe for one 'park job' to experience in a distinct occasion what it is like to be a volunteer at the park. A paper prototype of a smartphone application was used as a probe for this scenario. This application asked a series of questions to participants about their interests and based on that provided a list of park jobs that the citizen could hypothetically sign up for. The advantage of a park job over the previously described role cards is that separate jobs do not include long-term obligations or responsibility. Several other researchers [22, 23, 43], who have been studying similar bottom-up communities, have noted that imposing long-term obligations actually increases the threshold to participate, and would in this case be counterproductive.

The probes were evaluated in two sessions with 12 and 4 park users respectively. Participants were recruited from the casual visitors of the Dakpark. The first author discussed the probe with the participant while a research assistant made notes of what happened. After participants gave their consent, they were asked how they generally perceive the park, their motivation for visiting, and whether they know the park is managed by a citizen community. These questions served to determine if the participant fits the profile of park user, and to compare the participants perception of the park and volunteering to their perception after interacting with the probe. Then, the probe was explained and participants were asked to act out what they would do if they saw the probe in the park. Participants were encouraged to think aloud and to explain what draws their attention. To round off, participants were asked if their attitude towards the park has changed, due to their recent experience. Each discussion took about 10 to 15 minutes per participant. The interview notes were used for further coding and analysis.

5 FINDINGS

Discussing participation in the park community with participants revealed that only three of them knew the park was run by volunteers. Participants of the first and second probe consistently indicated time as being the main constraint for participating. Eight participants mentioned that they were uncertain their qualities would match the expectations of the park. Five of the participants that evaluated the first probe started to mention roles that were appealing to them due to a personal interest or because they could learn a valuable skill from it. However, they were not immediately inclined to become involved in the park community since they expressed needing more time to decide what they want to do in the park. Resonating with similar findings from other literature [7, 8], we could infer from the interviews that most participants shared a belief that they missed certain skills or abilities to become involved in the park community. These perceptions contrast with the open and accessible image that park communities think they have [35].

The first probe taught us that assigning citizens with a specific role puts a strong focus on the corresponding responsibilities. However, five participants mentioned that they would like to "help out one time to see what it is like." This indicates room for a noncommittal way of participating, and was further discussed with four participants participating in the second probe-session. Three participants mentioned that they would like to become involved specifically in the social aspects of the community. When using the paper prototype, two participants were curious to find out which jobs were available, as they wanted to skip the introducing questions to immediately see the park jobs. All participants explored the different types of jobs available, and chose one that aligned with their personal interest. For example, one participant expressed willing to help with the job repairing the picnic table, because he enjoyed working with his hands and fixing things. This motivation illustrates that participants appreciate opportunities to align their contributions to the park with their personal interest.

Engaging with the 'park jobs' did not resolve the concern of two participants with having a lack of time to participate in the community. However, upon seeing that a job would only take one hour, three participants indicated much stronger inclination to participate. These participants welcomed the non-committal ways of participating in the park maintenance activities offered by the probes. Following participants' suggestions, commitment can be better understood as a continuum with different levels of participation. Overall, the two probes revealed two particular issues that hinder community engagement, which are : 1) Park users do not know what they can do in the community to help, and 2) park users do not want to commit themselves to help regularly.

6 DISCUSSION

Unawareness of opportunities and fear of commitment are two reasons for which park users hold back from becoming involved in park communities. In response, in this section we propose two strategies for enabling park communities to be more open to newcomers, consequently lowering the community participation threshold.

The first proposed strategy is Enhancing initiative transparency. Park users are unaware of what they can do in the park and perceive participation as significant commitment. However, there are many different options for park users to participate, with different levels of commitment. This strategy is in line with research done by Gaftoneanu [12], who suggests that a transparent environment can lead to citizen empowerment. Using only social media to promote park activities, like the community currently does, does not effectively lead to offline engagement [17], due to so-called social costs preventing citizens to engage when the investments or risks do not match the benefits [14]. Next to that, current promotion mainly focuses on attracting volunteers for weekly or monthly maintenance tasks, while there are many other activities and tasks as well. Other ways of communication, such as local newspapers, personal communication, or community centres, could be used to enhance outreach and information detail.

The second proposed strategy is Embedding park activities in daily social practices. With different intentions for visiting the park, citizens also have distinct interests and motivations to become involved. For instance, a citizen who goes to the park for a workout, has a different motivation and interest to become involved compared to a family visiting the park for a picnic. Therefore, this strategy promises to offer park users opportunities for participation closely related to their daily activities they already execute in the park, their so-called park practices [20, 44]. In accordance with Jenkins et al. [18], this strategy considers the process of involving park users in the community from an object-oriented publics perspective, in which both human actors and technological artefacts contribute to the interaction between the park community and the park user. Using digital services to tailor content to the personal interests of the park user might work for park communities, to provide a more personalised process of becoming involved, based on the intentions and motivations of the specific park user [36].

These two strategies can strengthen the three aspects of community participation that were initially introduced, by taking certain actions as shown in Table 1. Regarding **mutual exchange**, the first strategy promises to help non-engaged park users to recognise what they can do in the community and, more importantly, what they will get in return for it [41]. The second strategy needs to make sure that an appropriate balance exists between doing something for the individual interest and contributing to the greater good [19]. The transparency strategy needs to reveal how the community is organised, what kind of subgroups there are, and what each of these groups contributes [22, 41]. It enables citizens to choose their preferred role within the community and gain trust that community members are contributing to common goals. To experience **self-organisation** within the park community, it is necessary that the division of tasks, roles, and responsibilities fits with people's practices and according skills [20, 32]. In that way, each citizen can choose a preferred role or task, while their joint efforts contribute to the larger community goal.

Transparency on the level of **shared ownership** is reached when decision-making processes are made explicit and inclusive, so that citizens feel they are being listened to and that their contribution is valued [25]. The strategy of daily social practices asks for a diverse set of activities, which address the intrinsic motivation of different people to make each of them feel responsible for the park. Mosconi et al. [27] as well as de Lange and de Waal [10] point out that some communities can be better understood as networked publics, in which activities and engagement are heterogeneous, rather than strive for a homogeneous community.

Table 1: Actions bottom-up communities can take to implement the two proposed strategies, for each aspect of community participation.

	Transparency	Daily practices
Mutual exchange	Recognise reci- procity	Balance common and individual in- terest
Self-organisation	Comprehend roles and collabo- ration	Distribute tasks based on skills
Shared ownership	Ensure inclusive decision-making	Tailor activities to interest

7 CONCLUSIONS

The presented research investigated the participation divide that park users of a public park in Rotterdam experience in the corresponding park community. Using two probe studies, two design strategies were identified to lower park users' thresholds to participate in the local community, which are as follows:

- Enhancing initiative transparency provides citizens with better information on opportunities of participation, their potential roles within the community, and the way their effort contributes to the community goal.
- (2) *Embedding community activities embedded in daily social practices* concerns the ability of the park to demonstrate their diversity and attract a larger group of residents, when participation is embedded in the social practices of each citizen.

While our research has focused on the specific case of the Dakpark in Rotterdam, the studied participation threshold can be considered relevant for citizen communities in general. However, due to unique characteristics of the studied context, it is likely that both forms and effects of enhancing initiative transparency will differ in other contexts. The issue of activating non-engaged citizens is nonetheless one that most citizen communities face, and we look forward to comparing results from our study to future studies in other contexts. Lowering the Participation Divide

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