Report of a Remote Participatory Design Process to Renew a Schoolyard during COVID-19

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Abstract: The aim of this paper is to share the experiences of an ongoing remote co-design process. With an inductive research approach, analysing the experiences of an ongoing case study, the research presents the challenges of remote collaboration such as the changed spatial understanding, transformed rules in communication and online community experiences. Pandemic circumstances allowed us to discover how remote settings can bring new rules and dynamics to participatory design processes. The research offers guidelines and solutions on how digital tools and online platforms can add value to community design processes.

Keywords: Online public involvement, youth engagement in landscape planning, digital toolbox, schoolyard co-design

1 Introduction

Discovering online platforms and remote working methods have become an important task with the spread of COVID-19. Among other professions, landscape architects are also facing many challenges of which participatory processes are just one. As community engagement processes also had to move to online platforms during the pandemic, it became a relevant and important landscape research topic. Some papers emphasize the role of participatory planning to create local strategies to cope with the pandemic crisis (BARBAROUSL 2020), some try to present hands-on ideas and practical guidelines for remote tools and methods (UDC 2020), and others try to highlight the unexpected benefits and opportunities such solutions can offer (HOWARD & ROBERTS 2020).

Although the importance of using digital tools in participatory processes such as virtual simulations, visualization, presentations or digital games was already growing before the time of COVID-19 (DEZUANNI 2018), remote participation was rarely conducted. Besides providing alternative ways of having meetings and technical help in exchanging ideas, remote design processes and digital participatory planning tools must pursue the qualities of meaningful face-to-face participation. Digital participation must not only collect data from participants and inform planning, but also develop social bonds and reorganize power relations of the community, as well as engage participants in a fun and exciting way (RUGGERI & SZILÁGYI-NAGY 2019).

2 Objectives

The objectives of the current research are to utilize the knowledge and experiences generated in the field of remote and online participatory planning in the LADDER Living Lab run by

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the authors and propose directions for the further development of digital and online tools in this field.

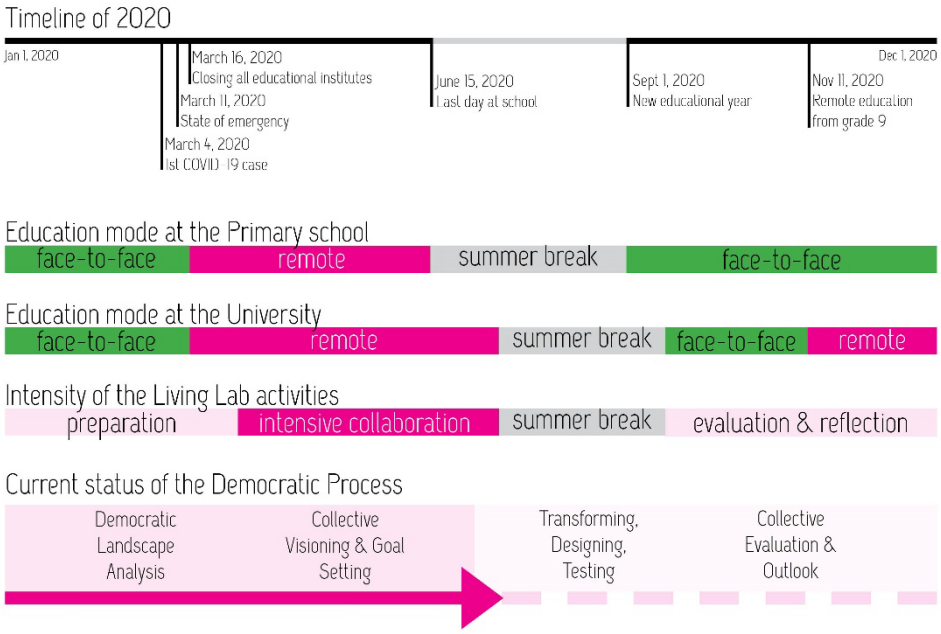

Fig. 1: Living Lab's participatory process in relation to the pandemic circumstances

Research is carried out in the LADDER Living Lab – a Laboratory with Students for Democratic Environment –, which is an exploratory collaboration space that allows continuous reflection and improvements of participatory methods through the combination of research and innovation processes within a mid-term partnership among the Landscape Architecture Faculty of Szent István University of Budapest, the NGO kultúrAktív and various local school partners[1]. The Lab is a user-centred, open-innovation ecosystem, operating in a territorial context of Hungary and with the thematic focus on democratic school environment redevelopment. Living labs operate with Participatory Action Research that repeats the following cycle for providing solutions for locally identified issues: co-creation, exploration, experimentation and prototyping, and evaluation (LED2LEAP 2019, PALLOT et al. 2010). Current research reflects on the experiences gathered in the first cycle of operation of the living lab and evaluates the remote participatory planning process carried out in the Elementary School no.1. of Budaörs. Figure 1 shows the timeline of the year 2020, how the Living Lab activities were embedded in the different educational systems operations. The education

[1] The Living Lab was born under the framework of the Landscape Education for Democracy – Learning, Empowerment, Agency, Partnership project. This international ERASMUS+ Strategic Partnership Programme aims to build long-term partnership between the academia and local community in order to create policies and processes related to democratic landscape change. To implement this approach, Living Labs are created locally where groups of actors in a community can be brought to form their landscape together.

modes of the university and the primary school gave the main framework of the collaboration which became completely remote.

This research (1) illustrates the findings related to the advantages and disadvantages of the online and digital tools used in the LADDER Living Lab and based on these first-hand experiences, it (2) outlines future development directions for digital and online tools for remote participation processes for further research.

3 Research Method

In order to identify the characteristics of remote participation, we decided to implement qualitative research (HOQUE et al. 2007) using semi-structured interviews. Experiences and observations of our living lab participants were analysed, systematically categorized and coded using the principles of Grounded Theory (FLICK et al. 2010) to generate a theory about the future development directions of remote participation. As we reached out to 23 participants directly with two online workshops (Round Table Discussion, Nominal Group Technique), and indirectly to more than 150 school community members (through questionnaires, mapping and drawing exercises), we decided to conduct 10 interviews that represent every role in our planning process: coordinators, parents, teachers, students, university students. We aimed for equal representation for all the perspectives (2 of each role), genders and age groups, and also direct and indirect involvement in the process.

Scope of the semi-structured interviews included three sets of questions: (1) influence of COVID-19 on the context of participation such as school environment, community, planning traditions in Hungary; (2) experiences and role of the interviewee in the participatory planning process; (3) opinions, advice related to the remote participatory process. Questions guided our interview process but allowed flexibility to adjust the scope, structure and depth of the interview when it was necessary. Interviews were conducted online via Zoom. These were recorded and then transcribed which was the basis of our qualitative data analysis.

In the analysis phase we identified in the transcript "key phrases, terms, and practices that are special to the people" (PATTON 2002) and marked the perspective of our interviewees about the phenomena, attitudes, challenges and benefits of remote and digital participation. Interviews confirmed already known evidence in remote and online participation (e.g. generational difference between digital competences), and they provided practical guidelines about how to organize remote participatory planning processes (DEMÉNYI & SZILÁGYI-NAGY 2020).

In this research, we discuss only three returning motifs that mark important development directions for digital and remote landscape architecture tools with the potential to elevate remote participatory planning to the next level. The three motifs are the following:

Spatial understanding of the design site: includes the advantages and disadvantages of technologically mediated or narrative-based mapping methods implemented in the project.

Communication in online workshops: includes our participants' perception of verbal and non-verbal communication, flow of dialogue and discussions, relating to others and building human connections in the online environment.

1) Team experience in remote participation: trust building, dedication to teamwork, as well as positive equal representation of team members are in the focus of this category.

The three categories are explained through illustrative quotes from our interviewees that pinpoint the most important advantages and disadvantages of remote solutions implemented in our Living Lab. The specific experiences of the living lab are used to generate theory about the potential development directions of remote tools and provide the basis of our Chapter 5 Discussion. Furthermore, quotes include a reference to the roles and perspectives of our interviewee which can be tracked through the corresponding Interviewee Code. Interviewee Codes consist of two parts: the letters stand for their role, and the numbers specify which person we talk to. The following codes are implemented:

- COO – project coordinator from the university and the NGO
- PAR – school parents
- TEA – school teachers
- STU – primary school students
- UNI – university students

4 Results

4.1 Spatial Understanding of the Design Site

Personal site visits were not possible due to the pandemic therefore there was a need to find remote ways to achieve a common understanding of the characteristics, challenges and potentials of the design site. The first-hand experiences were replaced by methods such as video walk, oral discussions in round table sessions, drawing from memory and evaluating the site on digital maps. Participants reported that this led to the disadvantage of *"not being inspired and affected on-site, only relying on your or others' memories"* (PAR-1). *"[Video] doesn't convey the mood at all as if we go there, we can't hear the sounds, can't feel the wind"* (UNI-2).

On the other side, the fact that planners were not able to visit the design site and were completely relying on the information provided by the local community helped to prevail the community's perspective over the designer's: *"landscape architects did not personally see the school. However, perhaps this was not such a problem since it is one of the basic approaches in community planning to understand what the community sees, feels and hears, and so in our case this has been absolutely achieved by the applied methods. I think in our collaboration the professional eyes remained closed, while the eyes of the community were open and sharp."* (COO-1) School community members on the other hand reported a better understanding of the various perspectives related to the site: *"Teachers and students have a completely different view of the schoolyard because students only see how they can play, while teachers see how they can most effectively oversee the children, [...] parents see it differently yet again because children are happy to [...] slip down on the muddy hill, but the parents have to wash their pants."* (STU-2) Interviewees also mentioned that that *"geography has a great potential [for remote technics], and digital space can be used better in this field"* (TEA-2) meaning that with the available visual digital materials it is possible to explore sites that would need a lot of effort to visit otherwise.

4.2 Communication in Online Workshops

Interviewees who participated in at least one of the online workshops expressed that they had trouble perceiving the emotions of the others, *"personal interactions did not come through"* (UNI-1); non-verbal information *"when you meet someone in person, the charisma, behaviour and reactions present in that situation give you an opinion about the person"* (STU-1); as well as eye contact: *"Now I find myself constantly looking down here and thinking how weird it is not to look people in their eyes, and even if I look into the other's eyes, he doesn't see me looking into his eyes, that was disturbing in a way but you have to let this feeling go."* (UNI-2). The otherwise natural flow of conversations took a monological turn and immediate feedbacks were missing: *"I think if we're next to each other [...] we can react much more effectively [...]immediately to each other and we don't have to wait for our turn to speak because [in the online environment] only one person can talk at a time."* (STU-2). They also missed the opportunities to engage in parallel and informal discussions which would be otherwise possible in personal settings: *"from this more casual atmosphere [in the offline environment], there are side conversations, which cannot be created online"* (UNI-1).

Several interviewees also mentioned that the online environment was more comfortable: *"in general, my girls don't like to go to school, but when the school went into online mode, they said they felt less stressed [...]and they liked this setting more so they actually performed better because of it"* (PAR-2). Another interesting phenomenon was reported by the participants who emphasize visual communication: *"I like the Mural platform, that I got to know through [the project]. I think it was good for brainstorming"* (PAR-1). *"We used a platform, [it was] like a digital board that could be edited by many at once. And there were some different games [we played]. There was also an opportunity to express an opinion in writing, on small post-it notes"* (UNI-1).

4.3 Team Experience in Remote Participation

Team experience and the sense of a community were seen as challenging aspects of remote participation because the online environment could not replace personal connections, leading to struggle in building trust: *"It's basically trust building, which again has to be the starting point of any community design, or even any community, […] and that was a lot harder [to achieve] in the online environment"* (COO-2); or working as a team: *"we inspire each other less in the online environment"* (UNI-1*), "sometimes it was hard to stay focused and don't open any other platforms or apps while somebody else was speaking"* (UNI-2), *"I noticed that I'm not so motivated in the whole thing, I don't feel it belongs to me so much"* (UNI-2). In such a team constellation there is a place for team-building exercises, although *"we have many more tools to build trust in a personal setting"* (PAR-1).

On the other hand, interviewees highlighted that the online environment can have a positive effect on the atmosphere of the meetings and help achieve a more friendly environment for collaboration and breaking the hierarchy. This effect was associated with the fact that teachers, parents and students were equally inexperienced in using online technologies and with the fact that school students helped teachers with technical questions and problems: *"everyone was a little lame, and that dissolved the whole thing a bit. [...] there were smiles and weird names [on Zoom], [...] and it simply eased the mood a bit in my opinion, adults could have been much more relaxed, more direct."* (UNI-2) Participants perceived each other as equals due to the visual representation of the Zoom environment: *"Doesn't matter who is the*

parent, the student or the teacher, everyone appears on the same platform in the same size of squares, having equal opportunity to have a say." (COO-2) *"I had a good time during the calls because I could really have a say and share my opinion at any time and it wasn't that you are just a kid and you couldn't intervene because you don't understand what's going on and what it's all about, but I was really involved like a design partner."* (STU-1)

5 Discussion

Our findings outline three important fields in which digital and online landscape architectural tools could be developed:

Elevating spatial experience: technical solutions could be developed for elevating the experience of getting to know the site. Besides the experimental quality of these tools, they would also need to focus on a comprehensive understanding and enabling the discovery of various qualities of the space. Creating immersive experiences through incorporating challenge-based, sensory and imaginative technologies into participatory platforms (GORDON et al. 2011), as well as solutions that help to enliven, record and use the physical, social, cultural and symbolic aspects, subjective and objective dimensions of the space.

Encourage non-verbal communication and visual experience: even if we find the best tool for a specific design method, an online environment brings instant challenges that can influence effectiveness and the final result of the method. Changed perception and unnatural flow of conversation, as an interviewee pointed out, might be addressed by facilitation methods and strategies: *"And there was a moment I realized that people need to be motivated and approached so differently online. [...] and after this occasion I really thought about how to make this [remote process] lively and vibrant, how to make a good meaningful conversation in the online environment at all, that is not like consecutive monologues, but a real dialogue"* (COO-1). Can technology have mediated dialogue work as natural? What are the other non-verbal tools that could help to negotiate discussions? There is a need for such technologies that build on non-verbal communication and visual representation, like immersive technologies – especially in processes where the Z-generation appears who is considered to be the visual-driven generation with an image-based communication (MC CRIDLE & FELL 2020) and solutions that incorporate meaningfully inefficient moments of sharing and exchange with the intention to bond participants and deepen dialogue (GORDON & WALTERS 2019).

Maximize team experience: while it must be stated that the role of the facilitator is crucial in remote participation in terms of designing and facilitating the participatory process in a way that it includes team building and icebreaker exercises that bring back the feeling of community, there might be a niche for online and digital tools and platforms that (1) enable activities that support good collaboration, team building interaction; (2) use an audio-visual language that contributes to a friendly and non-hierarchical atmosphere; (3) seem to contribute with their representation system to the democratization of the workshop atmosphere, redistributing power relations, a topic which is frequently discussed in participatory planning. Mural and Zoom are pretty interesting from these perspectives but what are the criteria of friendly and non-hierarchical platforms? These are questions proposed for further research.

In addition to the three fields of development that were identified in our research, an additional point must be made on the accessibility of the tools: we envision a development of creative common tools that are intuitive and allow self-organization. Tools that support cheap

and easy to use solutions for communities willing to create participatory processes could contribute with added value to participatory planning processes in the following three fields.

6 Conclusion

In conclusion, remote solutions can actually give additional value to landscape architectural participatory processes, however, turning the whole engagement process into online platforms is not very realistic as personal and physical connections are basic values in such methods. Online platforms and remote solutions can release the pressure of having everyone in one room at the same time which can be valuable even after the pandemic. Considering the fact that youth feel more comfortable in the online environment can be priceless in a design process where we want to engage them.

Our case study points out important directions for the future development of digital and online tools in landscape architecture to support participatory planning processes. We state that from an organizer perspective, remote and in-person participation processes require the same mindset – to think about the transformative aspects of participatory process that contributes to individual learning, community development and the physical change of the place (DE LA PEÑA 2017), or aims for a deep engagement on the ladder of participation (ARNSTEIN 1969) – but different skills and technical proficiency from the participants involved. While technical issues can be solved, and necessary skills can be learned, there is a need to develop and put technology at the service of participation and create meaningful and engaging experiences for the participants (RUGGERI & SZILÁGYI-NAGY 2019).

In order to understand and learn how remote settings and digital tools can have an increased value in engagement processes, carrying out case studies and sharing present experiences are extremely important. There is no one-size-fits-all method for participatory processes and the main challenge is to find the right tools and methods for the right purpose which needs education and a lot of testing. COVID-19 made it clear that there are other ways to do things – it is our responsibility how we use the learned experiences and how we use digital tools and remote collaborations even after the pandemic.

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