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CIVIC DESIGN THROUGH THE LENS OF SOCIAL LIVING LABS

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Abstract: This paper draws on the learnings from three practice-based design research projects that were carried out between 2013 and 2018. It aims at contributing to a deeper understanding of new agencies, roles and responsibilities of design – especially in the context of civil society and as a political actor that faces new complexities within the digital transformation discourses. As ICT increasingly act as mediator for novel types of communication, interaction and social and political participation, the projects have developed experimental and contextualized tools for civic engagement that provide insights on how a political understanding of design could shape local practices that foster the motivation for and the possibilities of democratic engagement.

In this paper we will start by introducing the concept of civic design, and its impact on debates around political agency and participation in design. We will then move on to focus on the impact of technologies for civic engagement and by drawing on our learning from the use of the social living lab model, we will present some conclusions that might provide new avenues for a critical conceptualization of civic and social design. We argue that it is precisely in conditions of complex structural crises, technology-induced transformation processes and uncertain forecasting conditions, that our disciplinary agency can play a decisive role in understanding the significance of digital infrastructures as socio-political practices.

Keywords: design research, living lab, social design, civic tech, design interventions

Introduction

We understand civic design – first on an operational level – as an approach within design that deals with the civic life in its broader manifestations. Civic design does not simply include the rituals of democratic participation through electoral processes, but instead focuses on forms of civic education and awareness, on new ways of working together with policy makers, public agencies and communities. It looks at the interactions among citizens that happen on a daily basis in all manner of civil society, when neighbours cooperate with neighbours, local civil servants deal with social problems, when they communicate and digitally engage in societal and local relevant issues, when community groups organise, and locally active peers ally themselves and share a common interest, and more. Civic design depicts opportunities and networks and mediates local knowledge through both digital and analogue technics and technologies – in order to foster civic engagement and digital participation. Ultimately, it has been argued, *'[...] civic design aims to contribute to new forms of living together'* (Di Salvo and Dantec 2017, p 66), where the role of design might shift to stronger considering the local context(s).

Against this backdrop, we look at design within its political and social implications, and how civic design and civic technology might co-influence processes of transformation. This paper draws on the learnings from three publicly funded, transdisciplinary research projects, which were developed within a framework of civic design. All three projects were asking about how to inquire and advance democratic practices at a local level, through small-scale appropriations and through civic technology. On a disciplinary level, they were asking about how to render visible the paradoxes that come along with socially engaged, participatory design, such as issues of power relations, co-determination of who

is entitled to participate in the processes, or who designs for whom with which assumptions and ideologies. Within a larger concern, the projects raised the question of how to deal with democracy threatening developments that get amplified by some aspects of the digital transformation – issues such as the increasing vulnerability and manipulation of individuals, the violation of fundamental rights through mass surveillance or the digitally mediated undermining of democratic institutions and practices, that become more and more threatening for an open and tolerant society.

The first example, the German-Israeli cooperation "Community Now? Conflicts, Interventions, New Publics" (2013-2016)[1], aimed at developing a deeper understanding of the potential of designerly interventions in diverse and conflictual communities. During the cooperation, in Berlin, at the Social Living Lab Mehringplatz, as well as in Jerusalem in the neighbourhood Pat, home to the bilingual, Arabic-Hebrew school Max Rayne Yad be Yad ("Hand in Hand"), a large set of co-design workshops, interactive installations and experimental digital tools where developed. Our goal was to better understand if and how communities and neighbourhoods can be supported by experimental, civic tech in the process of taking ownership of societal and political decision-making.

The paper will mainly focus on the subsequent project, Participatory City project ("Mit-Mach-Stadt Brandis", 2016-2017; "mitmachen" in German means *join*, *be part of*, *participate*),[2] which questioned how citizens use and adapt new digital means that have the potential to strengthen local social structures. The goal of our research through design approach (Fryling 1993; Findeli 2008) was to implement in the German city of Brandis (10.000 inhabitants) new avenues for civic participation in order to support those who were already engaged in democratic practices, but also to address the yet not-engaged citizens with informal participation opportunities, as well as to improve communication and exchange between the municipality and the citizens.

As a third research through design project, the follow-up cooperation "Citizens Connect Neighbourhoods – Community Development Harnesses Digital Transformation" (2016-2018),[3] aimed at engaging civil society, academia and policy makers into a participatory process in order to find out how to design a citizen-centred digital agenda in the German state of North Rhine-Westphalia, a digital agenda that strengthen the opportunities for social cohesion and inclusive, participatory engagement in the networked society.

What the here presented projects have in common is their collaborative partnerships with non-profit organizations, municipalities, and other civic initiatives, carried out within the methodological approach of socially oriented living labs. Each project critically asked how to advance democratic practices at a local level, especially by "bridging social and technical capacities for action" and thereby enabling "different publics to take action on issues of concern" (Dantec 2017, p 29). Efforts focused on questions of systemic, structural and technological conditions and potentials for civic and digital involvement.

In this paper, we will especially focus, as mentioned, on the project "Participatory City" (2016-2017). We contextualize the project's processes and outcomes with regards to design's political agency for strengthening those democratic practices that aim at preserving an open society and a deliberative public space, especially with regards to the ongoing process of polarization within our societies and the progressive radicalization of right-wing political groups (Doerr 2018). Within the project, we were able to theoretically question the design's potential for shaping local practices through a more inclusive, democratic urban development (Manzini 2014). In fact, all three above mentioned projects address issues of plurality and diversity, access and authorship of technology and digitalization within the urban space and on a local level. As Manzini points out, the groundwork for macro-transformations and for great systemic changes is laid by micro-transformations and by local systemic discontinuities (Manzini 2014).

In the following pages, we will introduce first how we see the role and the landscape of political discourse within design practice to take shape and how we position our projects; we will then

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[1] "Community Now?" (2013-2016) is a German-Israeli cooperation between Berlin University of the Arts (UdK), the German Society for Design Theory and Research (DGTF) and the Bezalel Academy for Arts and Design Jerusalem, funded by the German-Israeli Future Forum Foundation (DIZF) and the Federal Agency for Civic Education (bpb): www.community-now.org.

[2] Participatory City" (Mit-Mach-Stadt Brandis, 2016-2017) is a cooperation with the municipality of Brandis/Germany, funded by the Ministry of Interior in Saxony: www.mit-mach-stadt.de.

[3] "Citizens connect neighbourhoods – community development harnesses digital transformation" (2016-2018) is a cooperation with the State of North Rhine-Westphalia (NRW) and 14 civil society initiatives: www.modellproject-nrw.de.

introduce the concept of Civic Tech and how we used the model of the social living lab (Franz 2015) to challenge the "top-down" approach to the digital developments within the city. We will conclude with some theoretical considerations around the impact of the digital tools on groups and communities in urban context, that could contribute to the wider literature on civic technologies and inform on a context-dependent concept of civic design.

Design and political agency

Questions of ideology and political agency have been rarely raised in more mainstream design practices, although we can find in design history numerous positions and schools that discussed and interpreted the interdependencies of design and the wider processes of social transformation, from Bauhaus, to the Ulm School, the Participatory Design Movement in the 1960s, or developments like Critical Design from the 1990s. A large part of the design approaches has been regarded as at least in part politically motivated, driven by the idea of change by design, and being closely linked to critiques of consumerist design, as Nigel Whitely (1993/2003) formulated it in the early 1990s'. Since then much has changed, at least in certain areas of design practice and research, as questions have been asked about the political role of design to be disruptive of political systems and authority.

Working specifically in an urban context, Thomas Markussen (2013), for instance, is a scholar and practitioner who has interrogated how structures can limit and constraint local actions and social change in an urban environment, and has explored what the role of design could be to disrupt these structures and to rediscover the power of agency. In line with his thought, we aim to raise the question of the role for design research in design activism and civic design practice by drawing on Carl DiSalvo's conception of *political* design (Di Salvo 2012). *Political* design predominantly operates outside existing mechanisms of governance, in the sense that Chantal Mouffe positions this term (Mouffe 2013) as an agonistic discourse or conflictual controversy. It aims at rather unveiling these mechanisms in order to raise questions, to challenge existing conditions, to open space for contestations and for building alternatives to the status quo. Through the tactics of *revealing* and *contesting*, DiSalvo suggests, we can begin to consider political design as a "*kind of inquiry into the political condition*" (2012). We applied this definition of political design to the projects we are presenting here, as this allowed us to frame our practices of civic design on the theme of civic technologies according to the tactics of which DiSalvo talks about, and namely: revelation (through the continuous process of interrogating the status quo) of contestation (by generating alternative models through actions of research through design) and dissensus (which in our project took the shape of experimental making). DiSalvo's categorization offers valuable instruments for conceptualizing political design. However, the underlying understanding of our political design practice is deeply rooted in Dewey's political philosophy and his concept of democracy: "Democracy is a way of personal life controlled not merely by faith in human nature in general but by faith in the capacity of human beings for intelligent judgment and action if proper conditions are furnished" (Dewey 1939, pp 2). In order to be understood and lived, according to Dewey, democratic values have to be experienced, by individuals and collectives alike. This understanding of political (design) practice geos in line with the importance of micro-transformations for systemic change as outlined by Manzini (2014).

Taking a pragmatic political stance in our design practice, therefore, meant for the project to reclaim a role for design as an agent for providing an infrastructure for deliberation and the experience of self-efficacy towards democratic urban development. That meant not only providing the tools for collective practices, but also emphasizing on questions about how democracy, ideology and memory are manifested in the city, as we shall discuss below. Within a mesh of roles, tasks and tactics, such as bridging between different "logics" and "cultures" (e.g. governance logics of the municipality, cultures of voluntary commitment, discursive practices), providing low threshold access to digital means and bringing together different and even conflictual interests and stakeholders, design has become a "mode of political action" (Mareis 2014).

But the question to be raised here is to what extent is design able to instigate social and political change that can be related to the design practice in causa? The relationship between design and the concepts of social and political is not a straightforward one. While we might say that sociality is always something that will be mediated by design, as people are embedded in socio-material and socio-technological contexts, this does not automatically imply a role for design in social change.

Scholars have for instance critiqued this relationship, highlighting the incapability of design practices to challenge the established political order (Kiem 2011). Drawing on critical and political thinkers like Gramsci or Foucault, Kiem builds an argument for his critic due to the absence of power analysis from the majority of interventions and investigations in the field of design for social innovation. This lack is what makes design incapable of addressing, or even making sense, of contemporary issues of public concern. In this respect, our approach, which started with a deep, interdisciplinary analysis of the status quo and incorporated an analysis of the power dynamics, could represent an interesting tactic to counter these deficiencies.

The project

Specifically, within the project "Participatory City" in the city of Brandis, we approached these questions first by analyzing the existing socio-material infrastructures. Based on an intensive phase of qualitative social research, we were able to map the already existing civic initiatives that were active in the city, outline the mesh of interests, political stances, digital literacies, potentials and motivations for involvement and thereby shape our partnership and initial agenda accordingly. In the light of the open borders for refugees in the year of 2015 and the resulting (growing) polarization of the German society, we partnered up not only with the municipality, as our main project partner, but included other civic initiatives, different stakeholders and engaged citizens interested in working actively to promote a more diverse and open attitude among the local population especially towards migrant inhabitants. To bring together these diverse groups and civic initiatives, we chose to set-up a social living lab in the local cultural centre "Musikarche" (*arc of music*). The idea was to both establish a physical space for regular encounters, deliberations and co-development, and a methodological approach that takes into consideration and works with the local contexts. The living lab model allows for the boundaries between scientific work and the inhabitant's everyday practices to gradually dissolve the limitations between expert, non-expert and domain-specific expertise to be re-negotiated and re-organized.

After this intensive status quo analysis and the local anchoring, we managed to build a "task force" consisting of up to 20 socially and politically engaged citizens to co-research, co-design and accompany the entire process. From the beginning, is was important to think about the "taking over" of our endeavors by the initiative (the new formed up task force) after the end of *project duration* (Ehn 2009), taking into consideration the *design after design* (Binder, De Michelis, Ehn et al. 2011). With this core group of active participants, we conducted a series of intensive participatory workshops and co-design workshops, implemented interactive installations and realized public interventions throughout the whole project, which ended with the moment of handover of the project outcomes, activities and the elaborated formats of knowledge exchange to a group of self-selected responsible individuals. Together with the "Mit-Mach community" we developed a socio-material infrastructure (Star, Ruhleder 1996, Ehn 2008) that built on and extended already existing local structures (fig. 7). In the next section, we first illustrate the model of the social living lab.

The model of the Social Living Lab

Living Labs are part of a wider call to democratise innovation, both as a way to affirm what has been defined as a 'collective resource approach' (Ehn, Nilsson & Topgaard 2014) and to reframe the role of expertise within knowledge production, not by being against expertise in itself, but to challenge the idea of experts as a unique source of knowledge and authority (Schuler & Namioka, 1993 xi-xii).

The concept of the Living Lab first emerged theoretically from the Massachusetts Institute of Technology, and since then has been spreading rapidly and worldwide. The European Network of Living Labs (ENOLL), for instance, counts today more than 150 active Living Labs across Europe.

Although there is no agreement around one definition of what a Living Lab is, and there is a huge diversity across the spectrum of how these Labs are set-up and what values are they based on, we follow from the Scandinavian example and literature and describe these labs as being 'enabling platforms' (Emilson, Anders, & Serravalli 2014), that are built around the idea of creative communities, which are made of 'professionals of the everyday' (Meroni 2007).

The methodological ideas of the Living Lab, drawn on the Scandinavian model, are the following:

- The set-up of a collaborative space, where a variety stakeholders with diverse agendas work side by side;
- The conception of the Lab as an open space where mutual learning and respect to each other are supported;
- The establishment of a long-term engagement, to allow for the building of trust among diverse actors;
- The use of participatory design techniques to explore concepts and ideas in real-life and contexts and through hands-on work.

In the Scandinavian example then, the Labs have the feeling of an assembly, a democratic forum, where different people can engage in conversations to question what is taken for granted and explore how things could be done differently. Theoretically the Labs are based on principles of participatory action research, as it values and honours the knowledge and lived experience of lay persons, and it has the double aim of producing both impact and knowledge (Wadsworth, 1998; Reason 1994; Whyte, 1981); it is inspired by the practice of the pedagogy of the oppressed, as regarding the concept of conscientization as inspired by the work Paulo Freire (Freire 1996); it acknowledges the complexities of emancipatory research which can only be judged emancipatory by the results it truly achieve (Oliver 1997).

At the core of our social living lab approach were furthermore two concepts that seemed helpful with regards to the local context, namely design as infrastructuring (Binder et al. 2011; Ehn 2008) and interventions through civic technology (Bray 2007, Dourish 2010, Ratto and Boler 2014). We made use of these concepts to reflect on specific aspects of design's and the designer's role in collaborative environments and transdisciplinary frameworks that include stakeholders from different fields: designers, community organizers, technologists, policy makers and local actors. The conceptualization as *social* living lab emphasizes the assumption that the increasing symbiosis of local engagement and technological infrastructures gives way to new possibilities for collective and collaborative action to emerge – especially when the specific social context is regarded as central. Social living labs stress the importance of considering the local context by developing a space of encounter and collaboration that is rooted in the actual life-worlds of those partaking in these processes of transdisciplinary inquiry, and by implementing a set of co-design methods and experimental technologies that foster negotiation processes with a special focus on countering phenomena described as the digital divide and digital inequality.

The social living lab is an experimental environment that builds on already existing local structures, such as, in this case, the local cultural center "Musikarche". Mainly our Social Living Labs performed the following activities:

- Interrogation: through open ended debates in order to explore the status quo and to develop and exercise critical thinking (within regular monthly meetings)
- Research through design: to generate alternative models for research and knowledge production (through implemented prototypes in public space)
- Critical Making: through the use of artefacts and open technologies to remix, recycle and adapt ideas and solutions (through the participatory testing of open source technology)

As scholars have been highlighting the potential for Living Labs to be an ideal space for researching participatory processes in real world contexts (Åstrom et al 2005), we want to move in the next part of this paper to expand on the question of participation.

The question of participation: diversity and inclusion

The question of participation in design has been at times overlooked or oversimplified. As quests for more sophisticated ways of framing participation in design have been raised, also by the authors of this paper (Pierri 2018), more critical stance on collaborative approaches start emerging that try to avoid the risk of *romanticising* participation (Collins and Cook in Sangiorgi et al 2014), by assuming that participatory forms of design are in, and of themselves an efficient ethical act in the quest for ethical outcomes.

In our work, we refer to the ethos and practice of participatory design (from now on also PD) as defined within the Scandinavian tradition of social movements during the 1970s. This differs from

other traditional practice of collaborative design in many ways: it has a clear interest into issues of equality, social justice, participation and a particular sensibility towards problems and complexities, rather than solutions and simplifications; understanding and learning, rather than just intervening. Participatory forms of design aim at reframing the role of expertise within knowledge production, and while not being against expertise in itself, they challenge experts as a source of power and authority (Schuler and Namioka, 1993, xi-xii).

As Iversen et al suggest, the widespread use of PD practice by many, far beyond Scandinavian countries, has meant that the core of what makes a PD project and how this is different from any other collaborative design project has probably been lost in translation (Iversen O.S et al, 2012). The confusion is generated by the reification of the methods of PD and the element of participation itself, which brings designers to think they are doing participatory design just because they use some methods from PD tradition or simply because stakeholders are invited to participate in the design process. These two things on their own are not enough to qualify a project as PD.

When we refer to Participatory design we do it according to a values-based approach, as suggested by Greenbaum and Loi, and we identified the following values as underpinning our participatory effort:

- *"**equalising power relations** – finding ways to give voice to those who may be invisible or weaker in organisational or community power structures (...);*
- ***situation based actions** – working directly with people and their representatives in their workplace or homes or public areas to understand actions and technologies in actual settings, rather than through formal abstractions (...);*
- ***mutual learning** – encouraging and enhancing the understanding of different participants, by finding common ground and ways of working (...);*
- ***alternative visions about technology** – whether it be in the workplace, at home, in public or elsewhere; ideas that can generate expressions of equality and;*
- ***democratic practices** – putting into play the practices and role models for equality among those who represent others (...)."*

(Greenbaum and Loi 2012)

In our project, we were particularly aware of questions of ownership and power and how these operate and are transformed – if at all – during more collaborative design research work. Scholars and practitioners have raised several concerns towards some collaborative elements of design approaches as these present peculiar challenges, and namely the problems with the *locus of control* (Bowen et al 2013, Piper and Iedema 2010) as the dynamics and expectations that bring participants to be involved in a participatory intervention vary widely, with residents being directly concerned and affected, for instance, by any decisions taken, the wider public indirectly affected by our intervention, and the experts that might be taking part but who are not going to be directly affected by the changes that might result in a local context.

We found in this respect that the model of the Social Living Lab proved particularly suitable as issues of motivation, engagement and expectations are usually addressed and assessed beforehand and conflict between diverging positions and interests are taken into account and dealt with collaboratively.

Civic Tech: A Space in Between

Digital technology is increasingly interwoven with everyday life and has a strong impact on the socio-cultural transformation of today's urbanity. Urban spaces become inherently hybrid since ICT act as mediators for novel types of communication and interaction. In our project, we challenged the "top-down", smart city paradigm (Ryser 2014) with small-scale spatial appropriations. Our practice in fact, in line with the tradition of tactical media (Raley 2009), was not oriented toward realising big scale moments of disruption or contestation, but rather it aimed at engaging residents and citizens in small scale disruption and forms of *micropolitics* (Raley 2009:1).

We want to start by acknowledging that there is not the one shared definition of civic tech, apart from the wider understanding that this kind of technology has somehow to do with the use of the technology

for building and maintaining the civic space, from a citizen's point of view – in opposite of a technology-centred and application-oriented "hard" perspective.

Different definitions of civic tech can include a variety of examples like the so called GovTech, online advocacy groups, citizens science projects or crowdsourced maps and local information. Arguably, we could understand civic technologies as emerging from the tradition of critical making communities (Wiley et al 2014), which were widespread within art and design practice, and pursue the aim to question and transform how and who could create knowledge, that can be considered credible and actionable.

Practices of civic technology usually raise important, and sometimes overlooked, problems of access, sovereignty and control of the technology in question. These problems, like the problem of the digital divide, have been considered as an *embodiment* of wider issues of social inclusion (Selwin 2004), therefore they became central issues to address in projects like ours. To go beyond the limitations of the more traditional understanding of the 'digital divide', which developed around the 1990s and focused on access to the physical devices and to the connectivity (Jurich 2000), we refer in our work to the question of digital inequalities. With this shift, we aim at addressing not just the question of access, but the question of engagement, skills and outcomes as well, so that we can start considering the issue of the digital divide, not simply as a matter of 'having' or 'not having' (access to a device, internet connection, and basic digital skills) but through the lens of what has been defined as a '*rainbow approach'* (Selwin 2004), which makes visible the shades of inequalities that are at play in discourses and uses of civic technologies. More recent debates around the question of the digital divide have in fact highlighted that even among users with autonomous and unlimited access to the ICT infrastructure, there might be differences in their capacity to engage long-term with digital content and platforms, and with the capacity to achieve from our digital actions the same outcomes and benefit. This has been defined by scholars as the 'third level digital divide' (van Deursen and Helsper 2015).

Other scholars from the data justice movement, interestingly raise our attention to even more complex questions of inequalities, that become visible when we move from the level of the devices to the issues of the platforms that we use, and the data that we are producing, owning, using, or giving away (Daly, Devitt and Mann 2019). In this context, raising questions of data justice means to put under scrutiny the opaque, unregulated – and apparently un-contestable – digital systems, digital platforms and the technologies they use. In fact, also in line with the tradition of Participatory design practice (Greenbaum and Loi 2012), we considered our social living lab as a way to frame technology as being socially determined, and therefore prone to societal critique and re-appropriation.

In our project, in the attempt to open up a space to develop alternative visions of technologies, we asked ourselves, how could design enhance communities with hybrid (physical and digital) collaborative platforms and tools? Our main approach was to develop socio-material infrastructures (Star, Ruhleder 1996, Ehn 2008) that build on and extend already existing local structures, in order to counter the digital divide. Very early in the above described project, we identified the necessity to interweave digital and analogue avenues of communication and developed experimental forms for civic engagement, such as public interventions with interactive installations (see fig. 2). We widened the face-to-face encounters with new analogue and digital access points for exchange and information, and in doing so, linked together and updated different concerns and forms of expertise: some participants were experienced in founding and running an initiative, some in programming and setting up digital access points/interfaces, others in communication and media design. The central, physical platform – the social living lab embedded in monthly meetings – served as a space for encounter between these different participants and their expertise, and for implementing a set of participatory design methods and interventions. One key outcome was the strong desire for an independent digital platform with low-threshold access and means for self-organization. In a co-design process, we developed a citizens' platform (see fig. 3), among other tools. At the core of the digital platform are means for self-organization in different areas of urban social life, with basic functionalities: no registration is necessary, but the user gets topic notifications. It has a local administrator in order to control misuse and adapt it with more functionalities, if necessary. The platform aims to make the getting-to-know-each-other and meeting-up process as easy and open as possible, and lead to interpersonal meetings and face-to-face actions. It provides a continuous space for participation and discussion at local scale. The resulting ideas get bundled and communicated to the municipality.

Figure 1-3: The interactive installation, integration of public column, the citizen's platform

Another take on how to activate the multimodal socio-material infrastructure was the endeavor to establish a physical as well as digital local history platform. The first access point was established through a physical and public local history archive within the town hall, in which the physical material was collected, from postcards to handwritten letters, also to offer an interpersonal and intergenerational gathering point. To protect the heritage of oral history – still remained in the told stories by the older generations – a digital history platform was developed, on which not only the scanned materials could be sorted on a intuitively accessible timeline, but also narrations in form of recorded sound or video. To offer an even broader access to the digital infrastructure,[4] a physical story corner was installed in the town hall, where all citizens could record their stories in a protected space (see fig. 6). The overall idea was to embed the established structure in other activating formats, as a history school class, in which students interviewed family members and acquaintances, to save their situated knowledge and to inform historical events happening to this region centuries ago, as the German reunion in 1989.

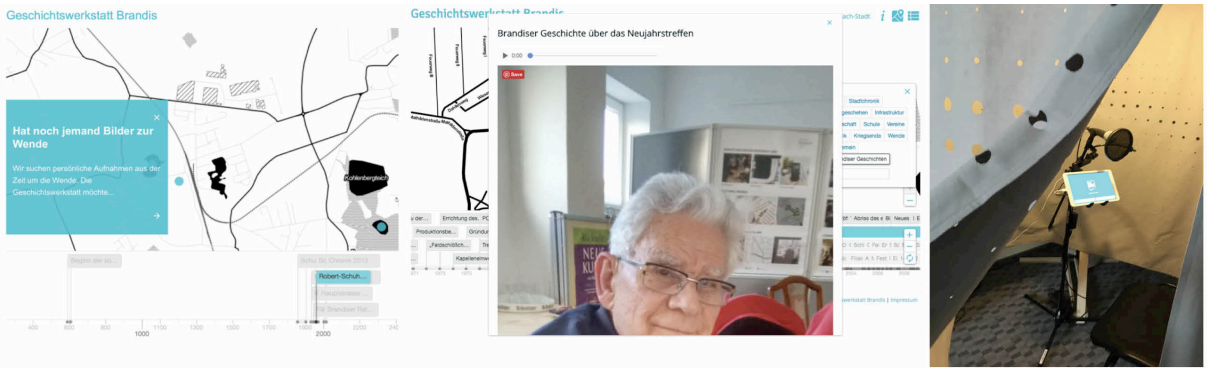

Figure 4-6: The Story platform, the recorded stories on the platform and the story corner installed in the town hall

In the final phase of the project, the established multimodal socio-material infrastructure was not only explained in face-to-face meetings but was also offered in a handy and accessible citizen guide (see fig. 8) with all needed links and background knowledge which was gathered during the one-year process.

While digital technologies were used to support the individual citizens in organizing joint activities and events, and also to support varied requirements of networking and commonality, and thus promote citizens' participation, it became certain that both local government and civil society actors must face the challenges of the digital divide and digital literacy to adequately address important questions of participation. Therefore the implemented socio-material infrastructure (see fig. 7) showed how digital, as well as interpersonal access points, complemented each other. The built and embedded structure offered multi-modal access depending on the diverse communication behaviours through which a new take to counter the social and digital divide was established.

[4] Next to the digital platform, also an open source app »Brandis Stories« was developed. To find on GitHub: github.com/DRLabCivic/GeschichtswerkstattApp [last retrieved Oct 13th 2019]

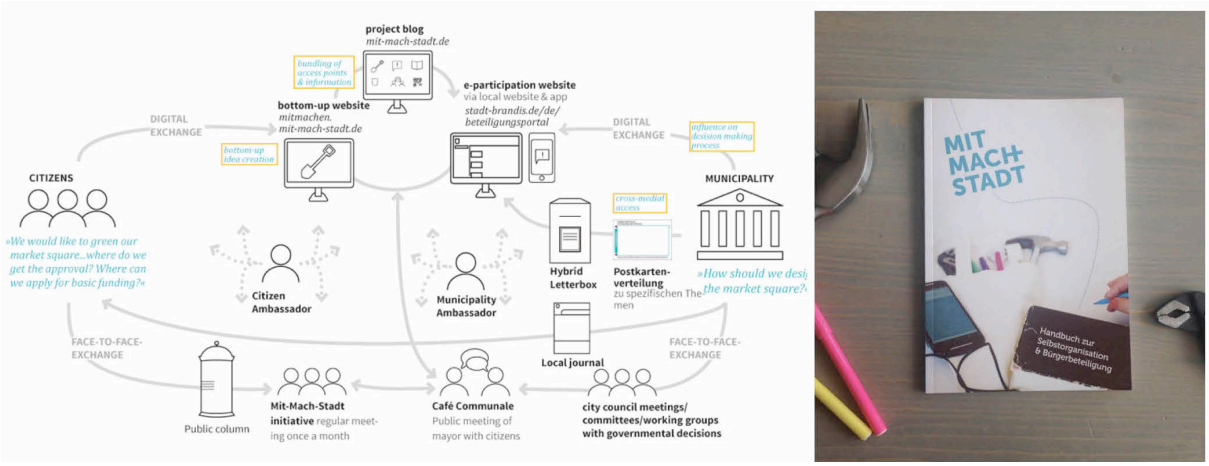

Figure 7-8: The established socio-material infrastructure, the Citizen guide (Herlo, Schubert, Sametinger, 2017)

Conclusion

Within this project, design played a major role in grasping local specific knowledge, establishing peer-to-peer networks and created a system that supported social and political involvement, conversation and the building of alliances, where the designers involved also acted as participants, observers, facilitators and catalysts – while integrating traditional design competencies at all levels of the project, from information visualization to translating knowledge, identifying issues and helping steer the process in the jointly desired direction. A core aspect within these processes was the personal value systems of the design research team, and how they were inscribed in designing situations, processes and systems as Judith Simon in "Values in Design" (2016) problematizes it. The importance of the identity of the designer has been also highlighted by Ezio Manzini (2015) who particularly focused on the shifts that are occurring as designers get increasingly more involved to activate, sustain, and orient processes of social change and social innovation. Through the concept of 'diffused design capabilities', which is the intrinsic capacity to design and to collaborate that everybody has, Manzini describes the process of how designers are moving away from the demiurgic vision of last century 'big-ego design' and in the process of framing a new role for themselves. Especially in the field of social design or design activism, designers need to find ways to engage in their work their personal values, ideology and stories (Irwin et al 2015) and think about themselves as professional but in a more holistic way. The ways we construct and represent stories, how we design our histories, as Clive Dilnot (2015) puts it, shape and determine our thinking and therefore our actions. What and how we tell has a huge impact on assuming an active role in designing present and future spaces of action, how we create trajectories for the future.

Being included from the very beginning in the design of the project and of the partnership, in fact, allowed us to take an active role that could also inform a contemporary design research agenda, where the role of design was increasingly political and designers were seen by institutional actors, as well as citizens, as playing a 'political' role: by creating the conditions and the space for engagement and mutual learning, making issues and conflict visible and tangible so that they can become object of debate, and providing ideas for possible alternatives *(reflection on macro level)*. The participatory approach of the Social Living Lab that we took in this project also was successful in allowing us to combine participants' tacit knowledge with the designer-researchers analytical and technical knowledge. It emphasized the role of the 'user' as an active 'non-design expert' with local knowledge, skills, organizational and other capabilities *(reflection on micro level)*. The design researchers became facilitators of specific design knowledge and transfer processes. We used our agencies (disciplinary agency) to make some paradoxes of the digital transformation visible, by assuming a more critical outlook on the consequences of engaging with ICT/digital platforms and services – such as an augmentation of structural inequality through the digital, exclusion, manipulation by social media and

exploitation by monopolizing platforms *(reflections on the meso level)*. The question of the impact of digital tools and technologies on cities, citizens and more marginalised groups, in fact, emerged as a critical one in our projects, where the role of design can be considered ambivalent, as the discipline of design has a key role to play in making the negative impact of technologies visible, but also has a responsibility in the shape that technologies take or do not take, what is made visible and what is not, what is possible and what is not, who has access and benefit from them and who is left out *(reflections on all levels)*.

The questions of how to grasp and also counter these consequences should be addressed by researchers from different fields of knowledge, embracing social responsibility and therefore ethical and humanitarian values, for a sustainable knowledge integration.

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