

Designing *with* and *for* social innovation: service design by working with youth civic groups in Lebanon

Sara Armouch

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إلى بيروت الأنثى مع الاعتذار (*To Beirut, the female, with an apology*):

"إِنْ يَمُتْ لُبْنَانُ ... مِثْمَ مَعَهُ
كُلُّ مَنْ يَقْتُلُهُ ... كَانَ الْقَتِيلَ
كُلُّ فُبْحٍ فِيهِ ... فُبْحٌ فِيكُمْ
فَأَعِيدُوهُ كَمَا كَانَ جَمِيلاً"

Translation:

*"If Lebanon dies...you will die with it
Whoever kills it... he is the slain
All ugliness in it.... is ugliness in you
so restore it as it was beautiful"*

ABSTRACT

Within contested contexts marked by profound political, social, and economic changes, social innovation emerges to reconceptualise services, ideas, and products. At the intersection of multifaceted agendas, social innovation brings forward a paradigm shift in tackling problems that traditional methods fail to adequately address. In this thesis, I focus on the context of Lebanon which suffers from political, economic, public health, and social turmoil. In light of a fragmented, politicised and weak welfare system, Lebanon is a fertile ground for the proliferation of non-governmental organisations (NGOs) and particularly youth-led, grassroots organisations that challenge the existing status quo by devising novel ways of creating and delivering services. Therefore, how can we surface, structure, and scale youth-driven social innovation in service design and delivery, through participatory methods within contested spaces? With participatory action research (PAR) as an overarching methodology and by applying embedded ethnography, participatory design (PD), and service design methods, this thesis examines social innovation focussed on designing services across three distinct contexts of civic engagement. These include: 1) large-scale organisations in which the youth are positioned as beneficiaries; 2) small-scale youth-led organisations; and 3) the Lebanese social movement of 2019, encompassing a constellation of local and transnational grassroots. Findings reveal tensions when attempting to adopt participatory research methods within environments which lack inherent participatory attributes. Conditions needed for the creation of technology-supported social innovation for service delivery within such a complex context surface, and new forms of socio-technical infrastructures resulting from circumstances of emergency and uncertainty are highlighted. I contend that a hybrid model of design with top down and bottom-up elements is most suited to be able to structure and scale out social innovation especially while navigating both embedded and emerging issues of participation and power. Also, the design and adoption of digital technology within such contexts requires re-purposing familiar tools and building new social practices around them. Finally, due to the ongoing and evolving negotiations that need to take place as a result of circumstances on the ground, researchers ought to shift roles ranging from facilitators to activists when working within such contested spaces.

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ACRONYMS

SDH: social determinants of health

WHO: World Health Organization

EMRO: Eastern Mediterranean Regional Office

CSDH: Commission on Social Determinants of Health

ICT: information and communication technologies

ICT4D: information and communication technologies for development

SDG: sustainable development goals

UN: United Nations

PD: participatory design

HCI: human-computer interaction

PAR: participatory action research

NGO: non-governmental organisation

CBO: community-based organisation

MENA: Middle East and North Africa

DFID: Department for International Development

MoPH: Ministry of Public Health

IHDO: International Humanitarian and Development Organisation (*fake name*)

LO: Lebanese Organisation (*fake name*)

WFP: World Food Programme

GoF: Gift of Food (*fake name*)

SWOT: strengths, weaknesses, opportunities, and threats

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CHAPTER 1. INTRODUCTION

“I've built my homeland, I've even founded my state - in my language.”

Mahmoud Darwish (*Palestinian poet and writer*)

Evolving and complex environments such as Lebanon bring to the fore a plethora of structural challenges and inequities from the lens of the social determinants of health. This opens discussions around the prospects of grassroots-driven socio-technical innovation, led by young people in particular, to address such challenges and to create alternative modalities of service delivery. Experimenting with the practices of participatory design (PD), provided an opportunity to better understand and address the nuances of participation, contestation, and power dynamics within intricate ecosystems. Additionally, the inherent values of ‘digital civics’ and the ongoing dialogue around positioning participatory design as a catalyst for social innovation have stimulated the research presented in this thesis.

1.1 The social determinants of health

The complex interaction between individual characteristics, lifestyle factors, and social, economic, and physical environments shapes health and wellbeing (The King’s Fund, 2021). The social determinants of health (SDH) are described as *“the conditions under which people are born, grow, live, work, and age”* (Commission on Social Determinants of Health, 2008, p.1). Hence, this refers to non-medical factors which profoundly influence health and behaviours of people and are shaped by public policy (Bharmal et al., 2015). The SDH framework developed by Dahlgren and Whitehead (1991) (Figure 1.1) came to ground public health and wellbeing within an interwoven web of micro-level and macro-level determinants. These determinants are related to one’s lifestyle and personal attributes but also transcend to economic, social, political, environmental, and cultural factors that shape the surrounding environments at local, national, regional, and global levels.

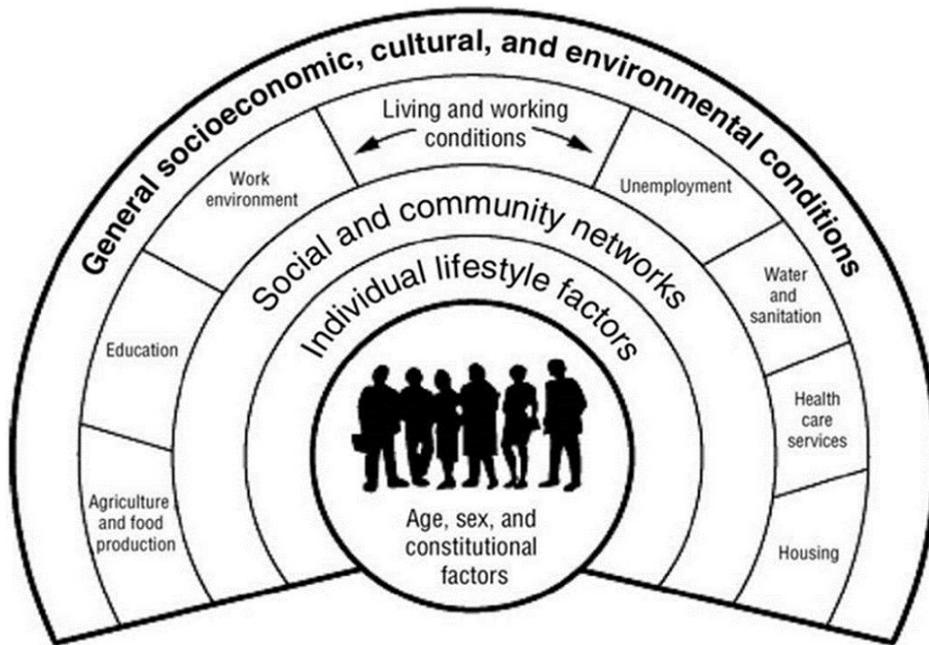


Figure 1.1 Framework of the Social Determinants of Health (Source: Dahlgren and Whitehead, 1991)

Researchers who explored socio-economic gradients in the United Kingdom over a period of thirty years contend that 'broader determinants of health' are more critical than health care in ensuring a healthy population (Braveman and Gottlieb, 2014). Some studies attempt to quantify how the broader determinants impact health: the Canadian Institute of Advanced Research (2002) estimated that health is 50% influenced by socio economic factors and another research study estimated that health is 45% influenced by social circumstances and environmental exposure (McGinnis, Williams-Russo, and Knickman, 2002). A large cohort study by Stringhini et al. (2017) included approximately 1,800,000 individuals from seven high-income WHO member countries. It indicated that in addition to the risk factors specified by the 25x25 initiative by WHO in 2011 (i.e., high alcohol intake, physical inactivity, current smoking, hypertension, diabetes, and obesity), which aimed to reduce mortality from non-communicable diseases by 25% by 2025, socio-economic circumstances ought to be targeted by local and global health strategies. Even in contexts of low economic resources, health effects can be ameliorated through access to new resources and opportunities. For example, Cuba and Costa Rica reflected positive health indicators as a result of long-term investments in education, social safety nets, and prevention-oriented approaches (Braveman, Egerter and Williams, 2011).

In line with research around the SDH, there is an escalating emphasis on understanding and addressing the fundamental causes behind health inequities, particularly the structural factors that affect health and health systems, government policies, the social, physical, and economic environments. Whilst addressing these macro factors is essential, the causal pathways and social processes linking them to health outcomes are long and complex and may include several sub-factors (Link and Phelan, 1995). In order to reduce health inequities across the world, it is pivotal to push for action with an aim of enhancing the circumstances in which people live and work (Marmot, 2005). According to Diderichsen, Evans and Whitehead (2001), inequality in health can be explained through the following mechanism: social contexts (i.e., structures of society and/or social relations) lead to social stratification and hierarchies which influence exposure to health damaging conditions and lead to differential vulnerability which is affected by resource availability. Consequently, such stratification ultimately leads to differences in social, economic, and health consequences across different groups of society. Hence, the WHO expanded the original SDH framework to capture these structural determinants as demonstrated in Figure 1.2.

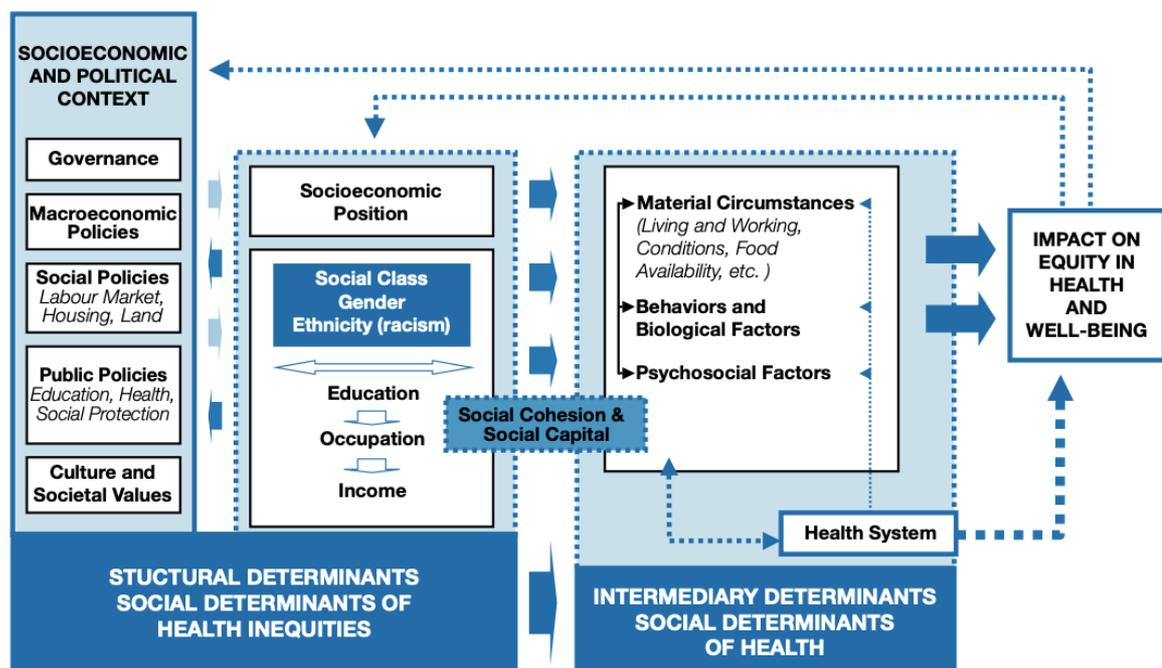


Figure 1.2 The WHO Social Determinants of Health Framework (Source: The WHO Commission on Social Determinants of Health, 2010)

Some approaches targeting the social determinants of health are depoliticised, while societal distributions of health cannot be separated from considerations of the political economy and

ecology as Krieger (2008) argues in her work. According to her ecosocial approach, social and biological factors need to be integrated and a historical, ecological, and dynamic lens has to be used in addressing health inequities. It is not sufficient to recognise the health effects of poverty but also to push for wider social policy, particularly in welfare sectors, in order to reduce health inequities which is an issue of social justice (Marmot and Allen, 2014). Consequently, action and policy need to have three strategic directions when tackling the social determinants of health including: 1) contextualised strategies, 2) intersectoral action since estimates demonstrate that the impact of sectors outside health on population health outcomes exceeds the contribution from the health sector and 3) social participation and empowerment. The WHO introduced a framework (Figure 1.3) to focus on the attainment of the Sustainable Development Goals (SDGs)¹ through an SDH approach but most importantly, it highlights the importance of a multi-sectoral, multi-disciplinary and multi-stakeholder approach to assess needs, implement interventions that address the social determinants of health and evaluate the resulting outcomes. The WHO framework contends that multiple key players such as governmental and non-governmental entities, civil society, academics, international organisations, private sector, and media need to be working collectively.



Figure 1.3 The WHO multi-sectoral approach framework (2020)

¹ <https://sdgs.un.org/goals>

1.1.1 The social determinants of health in the Middle East region

The WHO categorises Arab countries as belonging to the Eastern Mediterranean region. A report by the Commission on Social Determinants of Health of its Eastern Mediterranean regional office (EMRO) (2021), indicated that poverty along with cultural and societal norms, are the predominant challenges affecting health and proposed a conceptual and contextual SDH framework for the region (Figure 1.4). The report also conveyed that the inadequacy of data around causes of mortality render it challenging to determine the connection between social determinants of health and health outcomes in the region. Hence, data which reflects social, economic and area differences is vital for any action to be taken to improve health equity in the region. Current data according to the report, indicates that health inequities persist and are even widening between and within countries in the Eastern Mediterranean Region. These inequities in health are attributed to income, education, location, political status (i.e., refugees, internally displaced persons) and wealth.

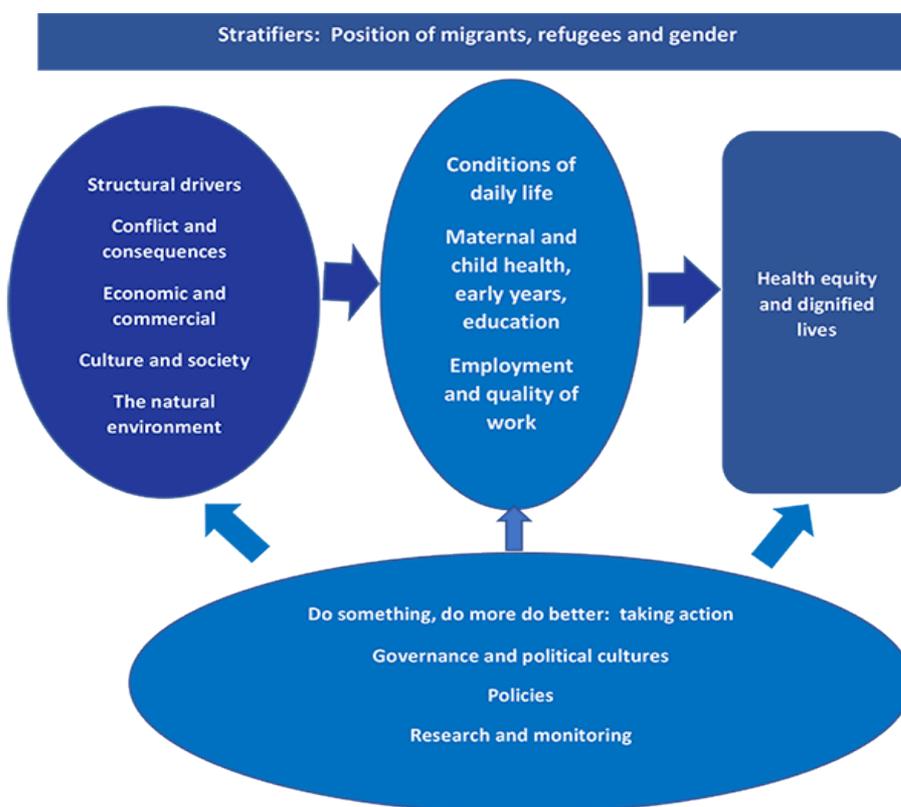


Figure 1.4 Conceptual Framework of the Commission on Social Determinants of Health in the Eastern Mediterranean Region (2021)

Most of the world's deaths from war and terrorism happen in the region with more than 150,000 deaths per year since 2014 (Commission on Social Determinants of Health of EMRO, 2021). Conflict leads to high rates of disability, communicable and noncommunicable diseases, and poor mental health, aggravating existing inequities and inducing massive migration and the collapse of governance systems (Commission on Social Determinants of Health of EMRO, 2021). In 2019, according to the report, employment rates between countries varied widely, and, when compared with other regions of the world, the Eastern Mediterranean Region suffered the highest youth employment rate (22.5%), with all the associated negative health impacts. Acknowledging that these inequities are cross-cutting social structures, remedial action is deemed necessary through different channels including governmental efforts.

1.2 Super determinants of health: digital literacy and internet connectivity

At the start of 2021, around 4.66 billion people (aged between 16 and 64 years old) were using the internet which counted as a 7.3% increase since early 2020 (Kemp,2021). Around four billion active social media users have been recorded, constituting an increase of 13% since early 2020, rendering the percentage of people on social media approximately more than 53% of the world's total population (Kemp, 2021). Consequently, almost 60% of the world's population is already online with increasing use of social media (Kemp, 2021). In addition, 66.6% of the world's population use a mobile phone (Kemp, 2021). Within such a growing and evolving digital ecosystem, efforts have intensified to create a multi-stakeholder and versatile digitalised world. Among the indicators of the SDGs, target 4.4 emphasises that *"relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship"* need to be fostered among youth and adults, most notably digital literacy. In light of the occurring digital transformations across sectors, it is suggested that digital literacy and internet connectivity have to be considered as 'super determinants of health' (Figure 1.5) because they influence all other determinants (Sieck et al., 2021). This entails having equitable access to affordable internet service, internet-enabled devices, technical support, capacity building training around digital literacy and online platforms, and content that enables collaboration and autonomous participation (Sieck et al., 2021).

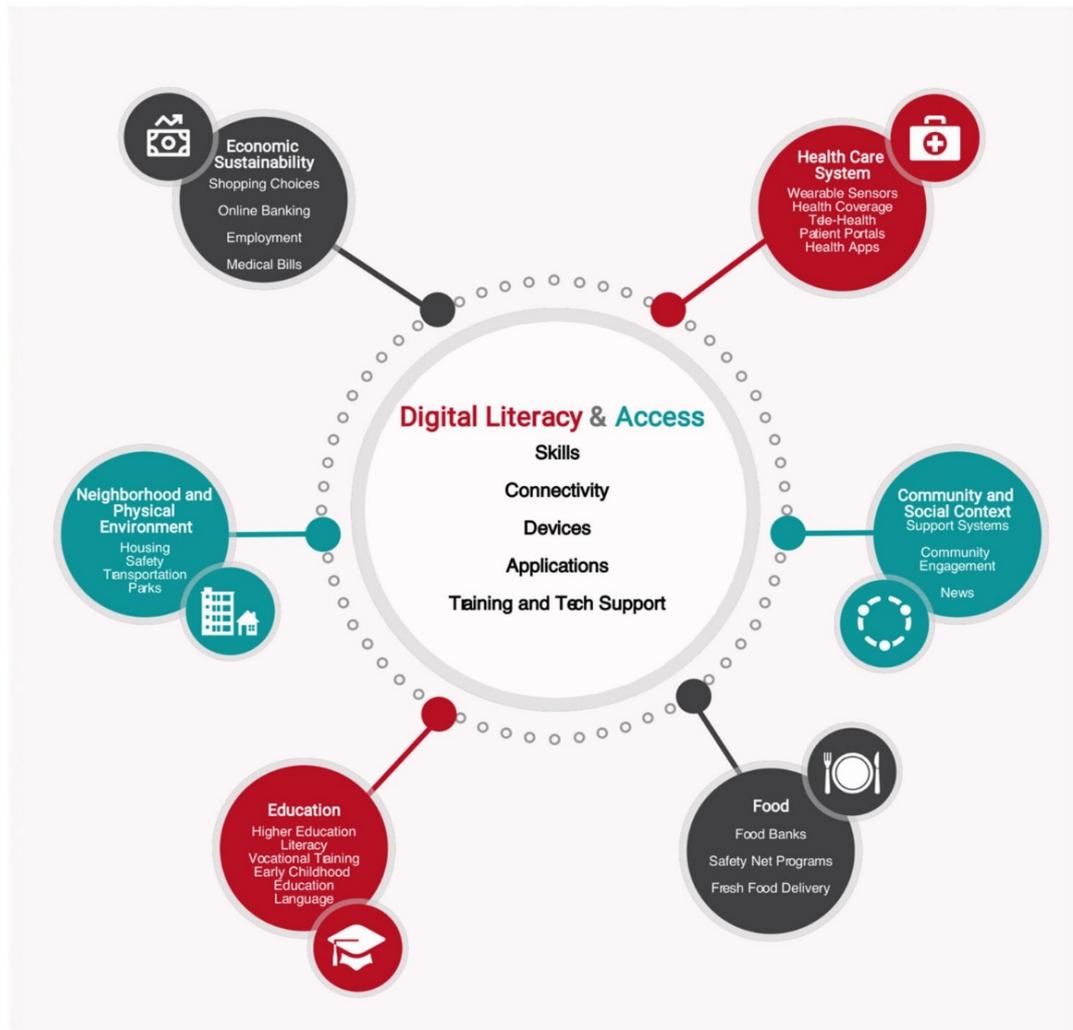


Figure 1.5 Digital literacies and social determinants of health (Source: Sieck et al., 2021)

A review conducted by Mesmar et al. (2016), highlighted that within humanitarian contexts, digital technologies facilitated communication, data collection, and analysis and coordination, leading to timely responses in the onset of crisis situations. Such technologies offer an array of advantages, yet their impact has not been evidenced by clear evaluation processes especially when adopted by humanitarian organisations. Such organisations often resort to a tokenistic approach and fail to actively engage communities in shaping and informing such technologies. Additionally, issues around privacy and equity come to the forefront as data management protocols are not always properly conveyed to people nor are safeguards instated (Mesmar et al.,2016).

Within the Middle East and North Africa (MENA) region, a digital divide persists across and within countries (Raz, 2020). In Lebanon, the number of offline citizens is relatively low (12%)

(Raz, 2020). Countries in the region share attributes which render internet access and digital literacy of high significance, not least a youthful population which faces education, civic and employment challenges, and low levels of Arabic and relevant content (Internet Society, 2017). Three main barriers remain salient facing digital transformation within the region: lack of access, lack of skills and lack of interest (Internet Society, 2017). In addition, the lack of contextualised digital content and opportunities pose a major obstacle for digital progress. People in the region mostly use the internet for social and entertainment purposes while missing out on other socio-economic opportunities including commerce, education, and health (Internet Society, 2017). The high cost and problems of connectivity within the region place people on the consumer end of the spectrum rather than as the creators of online content and services. Hence, the region is at a disadvantage in comparison to other regions because of restrictions, censorship, and slow-paced investment in digital opportunities (Internet Society, 2017). Local content and services have to be responsive to existing patterns within the region including access to the internet, local infrastructures, and usage.

1.3 A digital civics agenda of design and innovation

In line with the substantial importance of the structural determinants of health including digital transformation and what it encompasses, it is of the utmost importance to advance a digital civics agenda. Such an agenda promotes the creation of technology-supported services that rely on relational rather than transactional exchanges. Existing infrastructures of public services position citizens as consumers while local governments are the sole producers of information; digital technology is often introduced to cut down on the costs of such transactions. In contrast, the relational model that digital civics promotes, posits that citizens and community members ought to provide input into services with a genuine involvement (Vlachokyriakos et al., 2016). Through digital civics, the aim is to incite citizen-led commissioning of services by conducting long-term engagements with relevant stakeholders to inform the design of digital technologies that target various services and areas of interest (Olivier and Wright, 2015). Consequently, it opens the space for participatory platforms and creates new relationships across a spectrum of stakeholders with strikingly different agendas. By weaving together efforts to broaden participation, data-driven service delivery, and supporting local, national, and global civic enterprises, a digital civics agenda strongly endorses democratic and social justice practices (Vlachokyriakos et al., 2016).

Similarly, from a participatory design (PD) standpoint, those affected by a technology should be involved in design processes that envision the use of a technology before it is actually developed (Simonsen and Robertson, 2013). Yet, as a result of the changing landscape of innovation and media, design and innovation activities currently need to be adapted to a wider spectrum of contexts and competences (Björgvinsson, Ehn, and Hillgren, 2010). A myriad of actors is engaged to respond to identified problems, and digital innovation has to expand to the public sphere and everyday life by responding to social innovation. Social innovation as an *“articulated and dynamic processes where different actors behave actively and collaboratively in order to imagine and realise desirable social change,”* is not restricted to products or services; it transcends to being a principle, an idea, services, products, policies, a social movement or a combination of all of these (Meroni, 2007; Jégou and Manzini, 2008). In their work, Jégou and Manzini’s (2008) argue that in this case, design exceeds the functional consumer-driven mind-set to become a process for radical change in services, systems, and environments, paving the way for more sustainable lifestyles. One aspect of this shift towards coupling social innovation with digital innovation is digital infrastructure. Digital infrastructure is pivotal in creating links and partnerships between youth-led organisations and movements, communities, and other relevant stakeholders (UNDESA, 2006). Volda, Yao, and Kornoff (2015) stress the concept of ‘infrastructure’ which entails the support of local practices through natural, large-scale and ready to use technology. Infrastructure is perceived as being ‘invisible,’ changing over time and intertwining technological and social structures. They mention the need to explore current technological infrastructures in a holistic manner in order to be able to provide insights on the actual impact of the work done.

1.4 Research context

With the integration of digital technologies in the SDH and sustainable development approaches, investment is increasingly being channeled towards information and communication technologies (ICTs) and innovation in the Global South. Yet, the top-down model of development is being mimicked rather than adopting an adequate relational and bottom-up model as suggested by the digital civics agenda (Kendall and Dearden, 2020; Irani et al., 2010). Acknowledging the significant role of youth when planning for the future, the United Nations (UN) and development agencies call for harnessing young people’s knowledge and skills to inform and support the implementation of the 17 Sustainable Development Goals

(UN, 2017). Sustainable development and youth development are portrayed as being intertwined with young people being the driving force behind the SDGs. Focussing on young people in particular, it is pivotal to ensure equitable distribution in terms of access to adequate tools, the internet, and resources which enable them to cultivate their own motivations and civic identities (Alexander et al., 2017).

Examining the MENA region closely, youth often find themselves engaged in consultative tasks and solely approached as beneficiaries rather than initiators even in digitally supported initiatives (UNDP, 2016). This type of participation is often orchestrated by development agencies, governmental entities, and private sector. Hence, youth in the region turned to other informal forms of participation and self-organisation such as the example of the Arab Spring movement which relied on platforms like Facebook (Farnham et al., 2013; Tufekci, and Wilson, 2012). Turning to self-organisation is attributed to the non-bureaucratic environment it provides and because it enables people to better understand and capture the needs of communities (Sobeck, Agius, and Mayers, 2007). The low cost of coordination and participation through new communication technology reduces the dependency on formal organisations for collective action (Bimber, 2005). Yet, in the long term, self-organised groups cannot be sustained if they lack the proper governance and infrastructure including digital infrastructure (Volda, Yao, and Kornoff, 2015).

Lebanon in particular is a complex country with various political, social, and economic hindrances. Recent conflicts have rendered public services fragmented and centred around a clientelist model, which entails access to services and welfare based on a sectarian and/or political affiliation and through nepotism (Cammett, 2015). The shortcomings of governmental entities have pushed international development and humanitarian organisations to create aid mandates within the country. Consequently, this led to the proliferation of local non-governmental organisations (NGOs). Over the years, NGOs shadowed the government and took control of service provision to fill existing gaps: rendering it donor-dependent and raising inequalities across regions due to numerous factors including corruption (BRD, 2015). Mainstream political parties within the country mobilise youth through the creation of youth wings which are primarily sectarian and used for political gain (Harb, 2016). The socio-political fabric of the country urged many people, particularly young people, to form their own structures to challenge the existing *status quo*. Consequently, social

innovation manifested itself whether explicitly or subliminally through many of those configurations. While in most cases, they are themselves struggling, these groups and organisations aim to address pressing needs related to health service provision, food needs, education, environmental predicaments, and human rights through different mechanisms (Harb, 2018).

1.5 Research motivations, question and aims

Being a Lebanese citizen who has worked in the development sector within this complex context and acknowledging that digital innovation and its attributes are highly connected to the SDH, I was compelled to explore how a digital civics agenda relying on PD processes might inform the design of youth-led services in that space. In addition, recognising the impact of social power on changing health, economic, political, environmental, and social outcomes, I wanted to contribute to the creation of conditions and avenues that progressively nurture the ‘empowerment’ of the young people I would work with. I hoped this would be achieved through design and by urging them to problematise existing structures and practices around service delivery with an ultimate goal to address some of the inequities embedded within their context.

Recognising that the HCI research community has increasingly explored the intersection between information and communication technologies (ICT) and civic engagement related to service delivery, this thesis explores how such an intersection would unfold in a contested space such as Lebanon. With the emerging and diverse configurations of civic engagement, participation is manifested in different ways. Hierarchical and large-scale institutions/NGOs co-exist with smaller NGOs and grassroots, suggesting varying models of engagement. This results in a complex and intriguing ecosystem for civic engagement and service provision with its own dynamics. Tensions are continuously manifesting between the plethora of local actors, especially as the shortcomings of mainstream NGOs and their alignment with the political system of the country become more and more evident. Additionally, the local uprisings that erupted on October 17, 2019, surfaced additional local and transnational configurations of civic engagement and solidarity, challenging both the public and private sectors and the overall political and economic system of Lebanon. The emerging socio-economic crisis, accentuated by the COVID-19 pandemic and compounded by the Beirut Port blast on August 4, 2020 which led to massive losses at all levels, instigated additional efforts of self-

organisation, solidarity, and innovation to overcome the obscene failures of the public sector. The materialisation of such realities prompted me to explore how PD might support different aspects of social innovation that these different structures are proposing. While PD has a long-standing history within Scandinavian culture (Simonsen and Robertson, 2013), the context of Lebanon presents unique realities and challenges which have implications on participatory processes.

Based on the aforementioned, the main research question that this thesis attempts to respond to is: **How can we surface, structure, and scale youth-driven social innovation for service design and delivery, through participatory methods within contested spaces?**

In line with this question, the thesis aims to:

1. Understand youth participation within large scale NGOs through a comparative lens of three different contexts.
2. Explore the multiple facets of youth civic engagement within Lebanon to have a better understanding of civic realities on the ground.
3. Understand how PD can be fostered within varied configurations of youth civic engagement that focus on service delivery and welfare within Lebanon.
4. Investigate the possibility of infrastructuring social innovation in order to re-define service delivery (i.e., health services and welfare) and challenge the existing narrative of the public/private sectors of Lebanon.
5. Investigate the emerging socio-technical infrastructures underlying participation, civic engagement, and service delivery in times of crisis.
6. Contribute to knowledge around the interplay between youth civic engagement, social innovation, and PD within contested spaces.

1.6 Thesis structure

In order to position this thesis in relation to existing literature, I begin in Chapter 2 by reviewing existing related work around youth civic engagement, highlighting self-organisation in particular as a distinct pathway of civic engagement and participation. Additionally, I examine work anchored in digital civics that brings forward civic technologies that have been developed to respond to existing challenges particularly pertaining to public services. Since the main interest is to explore how participatory methods can support and propagate social innovation, I examine related work around PD with an emphasis on infrastructuring (as a design process through which designers can structure and scale civic engagement) and its critiques. I also unpick the notion of social innovation and surface the interconnectedness

between PD and social innovation. Building on the literature review and contextual information, in Chapter 3, I describe the process and findings of an exploration phase which I planned prior to developing my case studies. This phase was intended to validate existing work around youth civic engagement in Lebanon and to properly navigate that ecosystem while surfacing insights around innovation. As a result of this initial exploration, I was able to identify suitable organisations to be my collaborators in this research endeavour.

In Chapter 4, I present the methodological framing of this thesis. Participatory action research (PAR) is used as an overarching methodology. This aligns with my attempt to deconstruct the notion of participation within diverse structures and advance a more participatory culture for both research and design. Recognising the value of methodologic pluralism in such a complex research endeavour, I explain the implementation of both embedded critical ethnography and PD as core methods. Consequently, this mix of methods led to the development of three intertwined case studies which demonstrate the different contexts that this thesis is attempting to unravel.

The first case study in Chapter 5, fulfils the first aim of this thesis by presenting a broader understanding of civic engagement, particularly within mainstream and large-scale organisations. It portrays the example of an international organisation, assigned the anonymous pseudonym, International Humanitarian and Development Organisation (IHDO) which operates in various contexts through local entities that rely on top-down approaches of service and project delivery. This case study reflects how youth participation and volunteering unfold within such structures. It emphasises obstacles which hinder the advancement of a participatory culture from within. Through this case study I also report on perceptions around digital technology and subsequent design implications. Because my focus is on the context of Lebanon, I document in detail a longer engagement experience with the Lebanese entity which operates under this international organisation's mandate. Based on their request, I particularly examine their communication structure. The resulting insights of this case concur with some of the existing literature and pave the way for conducting the second case study.

Conceding that social innovation is more likely to occur within small youth-led organisations and grassroots, the second case study was developed under the assumption that PD and participatory processes could potentially be endorsed and nurtured within such structures,

while factoring in contextual realities. Two organisations were identified (a health oriented one: 4 all Causes, and a food security one: Gift of Food) but the subsequent processes of engagements with both were strikingly different for reasons that are elaborated in Chapter 6. The experiences with those organisations convey some parallels and contrasting findings in regard to the infrastructuring of social innovation through PD. From that standpoint, this case study brings forward design implications around the re-configuration of public services and service provision (mainly health services) within Lebanon.

The third case study in Chapter 7 materialised as a continuation of this narrative, especially as the events that erupted in Lebanon in October 2019 and subsequent crises were unexpected. It opened up the space for participation and increased the level of friction towards the State. Existing grassroots and groups such as the ones explored in Chapter 6 arguably played a pivotal role in being catalysts for those movements especially due to their agility. Nevertheless, several new local and transnational configurations also emerged which, combined with the aforementioned groups, composed a new ecosystem of civic engagement. This new structure unravelled the lack of trust vis à vis mainstream NGOs, certain actors of civil society, and international organisations which found themselves fading into the background. As such, it led to further dismantling of the 'NGOisation' of services, shifting community organising into the hands of citizens. The Lebanese diaspora was also mobilised and played various roles within this new reality. Consequently, solidarity became more prevalent and online and offline mediums of solidarity arose, creating an underlying socio-technical infrastructure for the overall social movement. In this chapter, I also discussed the example of a solidarity group with whom I worked closely in order to create a new relational and participatory model of civic engagement. The efforts with this group ultimately led to its transformation into a community-driven social innovation hub which was an existing gap in the local context. As such, this third case study intends to respond to the aim around surfacing underlying socio-technical infrastructures of participation, civic engagement, and service delivery in times of crisis, while also discussing implications on service delivery.

Through Chapter 8, I compare and contrast between the different case studies conducted and bring to the surface the underlying thread/narrative which brings them together. I particularly discuss issues around participation and power that manifested through the different engagements, scrutinising as such the application of PD in contested spaces. Additionally, I

provide implications on the design of un-platformed and relational digital tools within spaces of social innovation while accounting for contextual realities. I also describe the various roles and responsibilities that researchers are compelled to fulfil in order to be faithful to both their research requirements and the needs of the communities they work with.

In Chapter 9, I conclude this thesis by summarising the main findings behind the experiences with the different entities while highlighting the methodological nuances of this work. I also reflect on my positionality as a researcher in this research and expose the strengths and limitations of this work. Finally, I reflect on how the aims of the research were achieved, and provide insights related to policy and future work in that space.

CHAPTER 2. LITERATURE REVIEW AND BACKGROUND

“Don’t be satisfied with stories, how things have gone with others. Unfold your own myth.”

Rumi (*Persian poet, scholar and mystic*)

Societies are undergoing drastic changes resulting in the reconceptualisation of services, ideas, and products. These transformations are manifested through public health and social care services, educational reforms, emerging social economies, environmental advocacy, shifting politics, social mobilisation, and collective action (Murray, Caulier-Grice, and Mulgan, 2010). In this chapter, I review literature including frameworks around youth civic engagement and participation. I also examine previous work related to civic technology situated under a digital civics’ umbrella. Additionally, I define social innovation and unpick underpinnings of participatory design and its limitations with an emphasis on infrastructuring as a design process through which civic engagement can flourish and be structured. I explain the intersection between PD and social innovation in service design and delivery, and conclude the chapter by positioning this work and highlighting its contributions.

2.1 Youth civic engagement and participation

Civic engagement is defined in multiple ways and is based on a varying prioritisation of civic activities (Cutler, Hendricks and O’Neill, 2011). According to Adler and Goggin (2005), existing definitions of civic engagement revolve around four main categories: community service, political involvement, social change, and collective action. They further elaborate that civic engagement is more generally defined by Diller (2001, p.22) as *“all activity related to personal and societal enhancement which results in improved human connection and human condition”* and more subjectively as *“experiencing a sense of connection, interrelatedness, and, naturally, commitment towards the greater community (all life forms)”* (Diller, 2001, p. 22). A continuum of civic engagement (Figure 2.1) portrays layers of civic engagement ranging from informal (i.e., individual action) to formal (i.e., collective action) and focusses on either community activity (i.e., volunteering in service provision either formally or informally) and/or political activity (i.e., engaging in informal political dialogue or formally running for a political role) (Adler and Goggin, 2005).

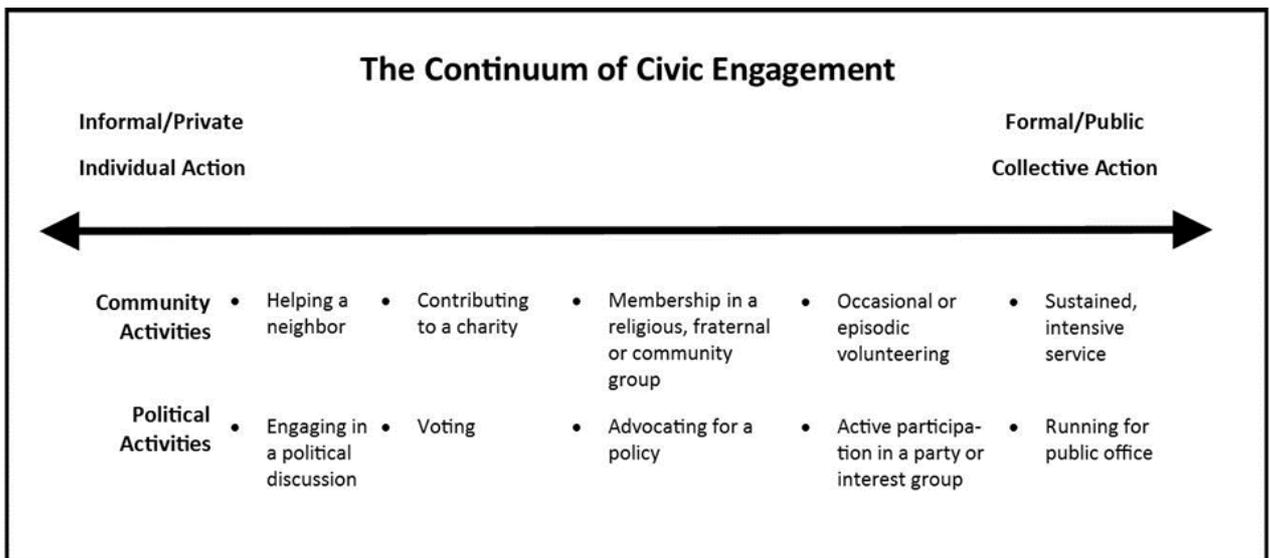


Figure 2.1 Continuum of Civic Engagement (Adapted from Adler and Goggin, 2005)

Youth participation in particular is defined by DFID (2010, p.V) as *“the active, informed and voluntary involvement of young people in decision-making and the life of their communities (both locally and globally).”* Furthermore, Hart developed a ‘Ladder of Youth Participation’ (Figure 2.2), adapted from Arnstein’s (1969) ladder of citizen participation, which was published by UNICEF in 1992 and is the tool which NGOs, international agencies and other actors refer to in order to characterise the different levels of participation of children and young people.

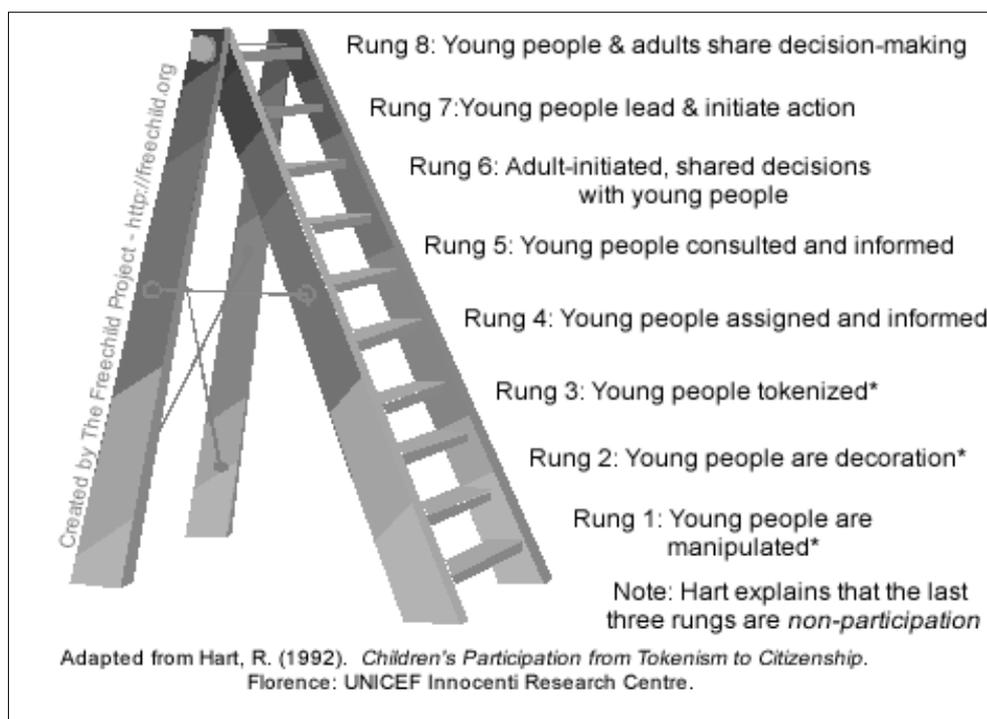


Figure 2.2 Roger Hart's Ladder of Young People's Participation

Examining the ladder, the three first rungs are considered 'non-participation' or 'non-engagement.' Youths, in that case, are either just attendees or have the impression of being engaged while in reality they are not. The fourth and fifth rungs are labelled as 'partial participation', where the role of young people is mainly consultative. The last three rungs of the ladder are considered to be 'youth participation' where young people share decisions and responsibilities and are in lead roles (FreeChild, 2017).

DFID (2010) suggests the 3-lens approach framework (Figure 2.3) which resonates with the 'Ladder of Participation' and where youth participation is divided into three categories: (1) youths as beneficiaries, (2) youths as partners, and (3) youths as leaders. Youths as beneficiaries implies sharing information with youths and preparing them to become collaborators. Youths as partners suggests mutual cooperation and shared responsibility; during this phase youths acquire the necessary experience to progress to the third lens which is youths as initiators and leaders. At this stage, youths lead the decision-making processes within existing structures or initiate their own projects (DFID,2010). Thus, adequate youth participation necessitates the involvement of youths at the three levels. To ensure progression from youths as being solely beneficiaries towards youths as assets, partners and initiators, there needs to be recognition and fostering of: youth agency, partnerships with youths, and conducive environments for youth participation (DFID,2010).

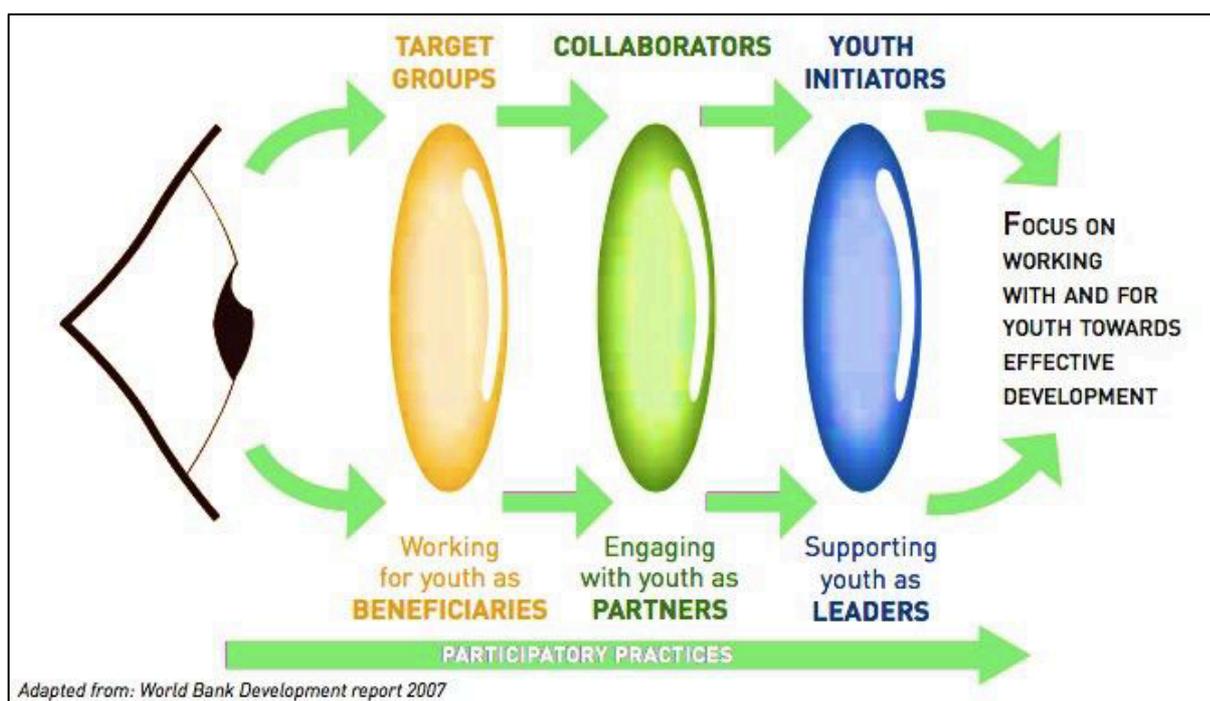


Figure 2.3 The three-lens approach to youth participation

Youth participation and civic engagement are core for communities. Engaging in collaborative civic action promotes connectedness between community members highlighting the role of youth as civic actors (UNDESA, 2016). Many countries lag behind when it comes to having structures and processes for effective youth participation and youths are often excluded from the general discourse. Consequently, more young people are reacting by either joining or creating youth led self-organised configurations and grassroots organisations particularly seeking innovative processes that are inclusive of local community needs in terms of knowledge, processes adopted, and resulting outcomes (Smith et al., 2013). Such 'structures' bring young people together to address problems in their communities and work on solutions promoting social change. These self-organised structures rely on four pillars: harnessing collective social power to challenge power dynamics, collective decision-making to determine priorities, building adult-youth partnerships and empowering youths for community change (Christen and Dolan, 2011). Nonetheless, such youth-led groups and grassroots organisations often find themselves struggling with limited funding and visibility, distrust from adult counterparts, and insufficient technical support (Sustainable Development Solutions Network-Youth, 2017). For this work, I broadly rely on Carpini's (2009) definition of civic engagement as a concept which encompasses the different dimensions of the continuum of civic engagement:

"Civic engagement is individual and collective actions designed to identify and address issues of public concern. Civic engagement can take many forms, from individual voluntarism to organizational involvement to electoral participation. It can include efforts to directly address an issue, work with others in a community to solve a problem or interact with the institutions of representative democracy. Civic engagement encompasses a range of specific activities such as working in a soup kitchen, serving on a neighborhood association, writing a letter to an elected official or voting."

Nonetheless, I contend that such frameworks and definitions of civic engagement do not overtly address the alternative political dimension of youth civic engagement which positions them in opposition to institutional politics. One core limitation of such frameworks is that they do not adequately address youth civic engagement within non-democratic contexts or in contexts with limited democratic practices.

2.2 Technology with a civic turn

There is an ongoing expansion of engagement between people and the digital world across different spaces and configurations (Björgvinsson, Ehn, and Hillgren, 2010). Projects and

initiatives revolving around technologies, with an emphasis on civic and community agendas, bring together various stakeholders and have an array of scopes including mobilisation of communities (Crivellaro et al., 2014), exploration of civic data practices (Boehner and Di Salvo, 2016) and analytics (Mačiuliene and Skaržauskiene, 2019), governance (Gilman, 2017), consultations (Johnson, Al-Shahrabi and Vines, 2020) and development of software processes (Skarzauskiene, 2018). According to Graeff (2018), civic technology is incorporated in a framework (Figure 2.4) which ties together democracy and citizenship. Civic technology can have multiple functions, including enablement of community participation, through which it influences citizen empowerment and vice versa. Subsequently, this impacts citizenship and its connection to democracy on a larger scale. Civic technologies do not emerge ad-hoc, they require time and resources to flourish (Foth, 2016). Being bound by context, local infrastructures, community practices and issues of trust (Corbett and Le Dantec, 2018), such civic technologies have to be designed as empowering spaces tailored to different contexts and communities. In general, research is broadening into exploring the civic tech movement across different regions of the Global South such as South America (Rumbul, 2016), Africa (Cheruiyot, Baack, and Ferrer-Conill, 2019) and Asia (Sun and Yan, 2020).

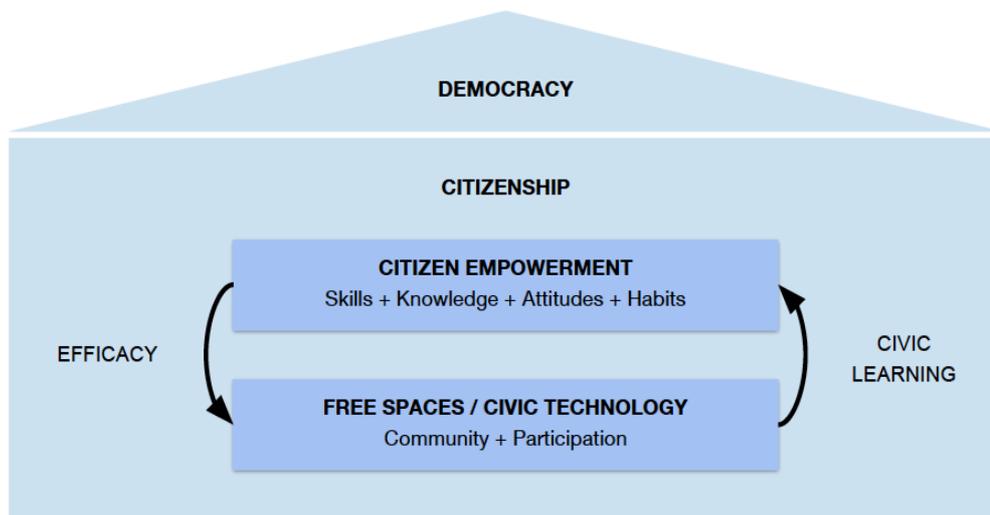


Figure 2.4 Framework for Civic Technology in Participatory Democracy (Source: Graeff, 2018)

From the lens of design, Korn and Volda (2015) contend that the design of technology tailored for civic engagement with all its facets can be categorised into four different strands: deliberation, situated participation, disruption, and friction. Deliberation is focussed on designing and developing technologies that enable deliberation. This entails improving digitally mediated relationships between citizens and governmental entities such as electoral

events, e-governance, and public consultations. For example, Johnson et al. (2016) talk about the deployment of public displays within two communities in the UK in order to facilitate public consultations around community cohesion and political disengagement. Situated participation, on the other hand, revolves around exploring technologies that bring together communities around common issues, subsequently raising awareness, initiating dialogue, and/or enabling collective action. Situated participation is either ideological: bringing people around a common issue, or spatial: bringing people based in a common location to work together. An example is the work of Le Dantec (2012) which described an operational bespoke technology called the *Community Resource Map* (CRM) in a shelter, developed for single-mother families to find out about housing, employment opportunities, health, and community news and information around childcare. Another example is the work of Crivellaro et al. (2016), a digital storytelling project titled *Travelling Suitcases* which enables multiple stakeholders in communities to express their memories and perspectives for re-envisioning their place and communities.

The disruption strand of research is concerned with the communication, coordination, dissemination and mobilisation of social movements that sparked out of various social, economic or political crises such as for example, the Arab uprisings, the 15M/indignados demonstrations on 15 May, 2011 in which people took the streets in Spain to contest upcoming municipal and regional elections (Anduiza, Cristancho, and Sabucedo, 2014) and the Umbrella movement, which took place in Hong Kong in 2014 as a response to changes to the electoral system (Lee, So, and Leung, 2015). These movements are characterised by disruptive short-term protests and opposition to the existing status quo, and are heavily orchestrated through social digital networks (Wulf et al., 2013). Friction explores recurrent activities of civic engagement in which citizens create their own civic lives and re-appropriate in their own way political, cultural, and social structures, in contrast to being in direct dialogue with governmental entities or being passive consumers. It provokes people into questioning norms and values and into becoming actors of radical change. For example, Hirsch (2009) describes Dialup Radio, a phone-based media distribution system, designed for Zimbabwean human rights activists and civil society to communicate while by-passing governmental restrictions.

Overall, such design and deployment of civic technologies is highly promising with positive outcomes in certain instances. However, it emphasises civic technologies as an outcome with prioritisation of technological novelty with limited understanding around the resulting community practices (Gordon and Lopez, 2019). Some of the tools fail to become relevant to public institutions and organisations (Simpson et al., 2017). Civic technologies cannot serve as mediators of democracy solely based on ease of use and engagement with a platform; instead, they ought to cultivate a sense of civic agency (Graeff, 2018). Sustainability of such technologies, as in their ability to stay operational and useful over time, is questionable beyond project timescales (Taylor et al., 2013). In addition, a major drawback which is common in such research endeavours, is the weak assessment of the social impact of these civic technologies. Additionally, the limited discussions around hand-over processes to grassroots organisations lead to the researchers mostly designing innovative prototypes that are not necessarily scalable or sustainable (Adams, Fitzgerald and Priestnall, 2013).

2.3 Unpacking participatory design

2.3.1 Conceptual underpinnings

Asaro (2000) suggests that PD can be a model for critically designing new technologies rather than solely including public dialogue into technology design. Historically, PD is inherently political, and made its debut in Scandinavian studies around workers being alienated due to the introduction of new technologies in the 1960s and 1970s. Halskov's and Hansen (publication date p.87) state *"how PD unfolds through a series of design events, strung together by decisions, interpretation, and planning."* They note that PD is about: 1) politics (*"people who are affected by a decision should have an opportunity to influence it"*), 2) context (*"the use situation is the fundamental starting point for the design process"*), 3) people (*"people play critical roles in design by being experts in their own lives"*), 4) methods (*"methods are means for users to gain influence in design processes"*), and 5) product (*"the goal of participation is to design alternatives, improving quality of life"*). Participation is at the core of PD and the principles of the latter revolve around equalising power dynamics among those involved in order to bring to the fore voices of marginalised members (Rachael, 2018). Additionally, by promoting democratic practices (Greebaum and Loi, 2012), PD provides an avenue for mutual learning between researchers/designers and communities and is a foreground for the creation of technology built on equality and social justice (Rachael, 2018).

Based on the aforementioned, one core PD framework for co-design (Figure 2.5) that informed this research is founded on three main dimensions of participation that activities are built around: making, enacting, and telling. These three elements are interconnected since participation usually takes form through iterative cycles of making an artefact, telling stories around it, and enacting how it might be used in real life settings. Without the three dimensions, any resulting artefact does not hold much meaning (Brandt, Binder and Sanders, 2012).

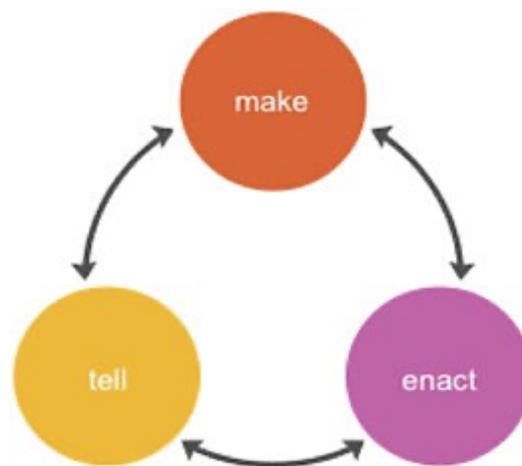


Figure 2.5 Making, telling, and enacting as complementary, connected activities in codesigning (Source: Brandt, Binder and Sanders,2012)

2.3.2 Infrastructuring practices

Star and Ruhleder (1996) postulate that physical and technical infrastructures are intertwined with human relationships and practices and, therefore, are inherently socio-technical. These infrastructures are invisible, shaping routines and engagements in the background (Star and Ruhleder, 1996; Lustig and Nardi, 2015). When exploring the interlinkage between participatory design and design for civic engagement, in order to foster and support successful initiatives, and to construct networks among the multiple actors, ecosystems of civic engagement need to be built; this is referred to as ‘infrastructuring’ (Manzini, 2015, p.159). Infrastructuring as a mode of design engagement comes in to bring forward existing socio-political infrastructures that influence the design of technology. It transcends the level of only one design project into an ongoing process involving multiple design initiatives and collaborators which aim to instil a more sustainable and solid social change (Manzini, 2015). Due to changes or disruptions that occur, infrastructures are likely to breakdown and become visible. As such, existing and newly created infrastructures might no longer work, and people will then have to create adaptive mechanisms to overcome these disruptions (Semaan, 2019).

Consequently, the design process becomes the means of radical change affecting services and surrounding environments and systems (Jégou and Manzini, 2008).

In their work *tales of institutioning and commoning* around infrastructuring practices, Teli et al., (2020) describe two different directions of design (Figure 2.6): 1) institutioning which is adopted with conventional institutions and 2) commoning which is adopted with grassroots entities. In the case of institutioning, the aim is to incur a transformation within the institutional frameworks of an organisation. For commoning, the aim is to foster social collaboration and create a range of social relations between different stakeholders by endorsing various forms of participation. In addition, Teli et al., (2020), describe the concept of redundancy which is cross-cutting between grassroots entities and institutions and refers to the ability of either entity to take over the design process with the presence of the designer unnecessary after a period of time.

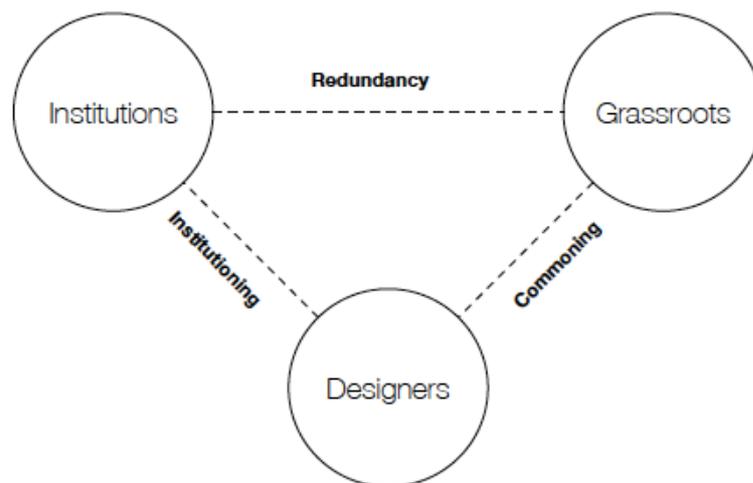


Figure 2.6 Relationships between designers, institutions, and grassroots organisations (Source: Teli et al., 2020)

2.3.3 Scrutinising PD

Conventionally, Scandinavian PD which relies on a dialogical engagement between the participants and the researchers who are co-sharing knowledge through an established process can be ‘messy,’ but is not necessarily being implemented in emotionally charged situations (Clarke et al., 2013). Within such complex situations and contexts, power dynamics are more pronounced, and such ‘carnal’ situations (Wacquant, 2005) compel us to problematise the normative ideals of participatory design. PD is grounded on concern around local accountabilities (Suchman 2002) as such that projects are meant to be relevant and

suitable to the local characteristics and circumstances (Simonsen et al., 2014). Hence, while PD has been able to transcend its Scandinavian roots and has been extensively applied in challenging contexts including developing countries, the ties to conflict and power while being recognised were often downplayed. According to Bannon, Bardzell and Bodker (2018), current research involving PD is distorted since the political nature of PD is being replaced with more consumer-oriented methods rather than genuine attempts to instil democratic and social justice principles. It does not suffice to acknowledge the existence of power through a conceptual lens but to actually co-develop practices that would lead to the empowerment of marginalised groups. Subsequently, this incites a structural transformation of political and economic relations to attain a more democratised society (Mohan and Stokke, 2000). In addition, the scale of PD is perceived as limited in scope with an inadequate ability to address more global concerns such as forced migration and climate change for example (Bannon, Bardzell and Bodker, 2018).

Finally, it is pivotal to make the distinction between practices and interactions that might inform PD within formal organisational settings (where it initially originated) and those reflected within community settings. Community-based participatory design, which is broadly defined as work that focusses on social constructs and relations of groups within certain settings beyond traditional organisational boundaries (Di Salvo, Clement and Pipek, 2012), takes PD to another realm and challenges its ideals. Through the research described in this thesis, the aim is to balance the depth and breadth of PD methods and practices. This implies re-visiting PD underpinnings through a contextual standpoint, particularly in light of uncertainty and compounded crises, and to reconcile between the realities on the ground whether organisational or structural, and the capabilities of PD as a design framework to address those matters.

2.4 Building an understanding of social innovation

When examining civic engagement, the interest is not just in studying the civic roles young people take on in youth-led groups and movements, but rather in investigating the prospects and occurrences of social innovation within that realm. Echeverría (2008) argued for the expansion of the definition of innovation from a market-oriented one-to-one that was more focussed on improving societies through artistic, educational, and cultural pathways. Similarly, Harayama and Nitta (2011), and Howaldt and Schwarz (2010) endorsed a shift in perspective

around innovation since the existing technological and economical approaches were dismissive of underlying social issues. Their argument around the proposed paradigm shift was based on the changes that society was undergoing, transitioning from an industrial one to a service-driven one (Howaldt, Butzin, Domanski, and Kaletka, 2014, p. 157). Social innovation was seen as different and independent from the innovation concept that was predominant at the time, extending beyond economic growth (Howaldt, Butzin, Domanski, and Kaletka, 2014, p. 115). It mostly flourished as a concept as a result of the shortcomings of governments (i.e., in adequate tools) and markets (i.e., in adequate incentives) to be responsive to the pressing needs of communities in fields such as public health, environment, public participation, and active aging (TEPSIE, 2012; Rodriguez and Alvarado, 2008). The Young Foundation and Social Innovation Exchange (Pulford, Hackett, and Daste, 2014) suggested six trends that resulted from the spread of social innovation including: 1) new pathways for ideas, 2) innovative finance, 3) better infrastructural support for start-ups, 4) shift towards resources and knowledge sharing practices, 5) scale and impact driven frameworks and 6) proliferation of social innovation ecosystems (i.e., systemic innovation).

Systemic innovation in particular aims to create ecosystems of social innovation in motion to ensure the sustainability of initiatives (García, 2017) and can be triggered due to a crisis or disruptive technology. Often, it is the outcome of slow and cumulative processes encompassing fluctuating behaviours, cultures, and infrastructures (Pulford, Hackett, and Daste, 2014). It equally holds changes to power by shifting power dynamics and targeting specific sectors: business, government, civil society, and the household. In order to build such systemic innovation, it is important to form coalitions between different partners, fostering skill sharing and training and devising rigorous processes to build shared visions (García, 2017). Consequently, this leads to legal transformations pushing for the emergence of new rights and cultivating a sense of empowerment among those involved in the processes of social innovation (García, 2017). Nevertheless, such systemic innovation is rare in stable times particularly due to lack of incentives for change (Frias, Lozano, and Aparicio, 2016). Additionally, threats and radical ideas to challenge the existing status quo are frequently deflected by power holders which jeopardises the infrastructuring and propagation of such social innovation (García, 2017).

In this research, I rely on Meroni's (2007), and Jégou's and Manzini's (2008), definition of social innovation as *“articulated and dynamic processes where different actors behave actively and*

collaboratively in order to imagine and realise desirable social change.” Social innovation is not restricted to products or services; it transcends to being a principle, an idea, a movement or mix of all. Its foundation relies on meeting social needs while creating new social relations (Björgvinsson, Ehn and Hillgren, 2010). It is able to combine interdisciplinary methods and tools from multiple fields such as social economy, social entrepreneurship, and enterprise and from both the public and private sectors (Murray, Caulier-Grice and Mulgan, 2010, p.2).

Murray, Caulier-Grice, and Mulgan (2010, pp.11-13) propose the following social innovation process (Figure 2.7) which includes:

- 1) Prompts, inspirations and diagnoses: the need for innovation is identified, the problem is framed and the context is understood.
- 2) Proposals and ideas: ideas are generated.
- 3) Prototyping and pilots: ideas are tested in practice.
- 4) Sustaining: an innovative idea is embedded into daily practice.
- 5) Scaling and diffusion: innovation is expanded and magnified.
- 6) Systemic Change: existing structures with underlying power dynamics are altered.

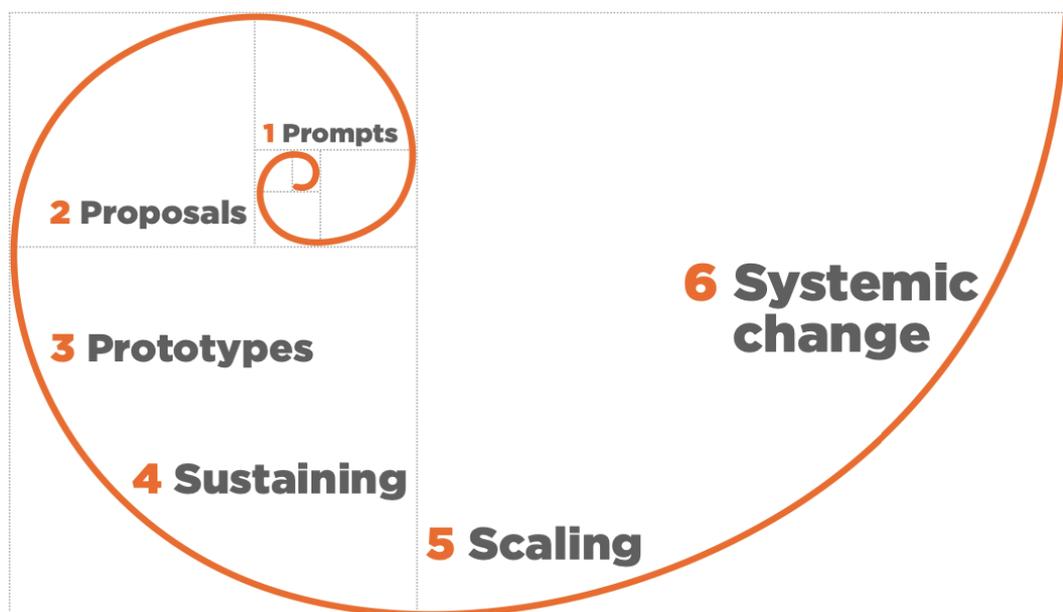


Figure 2.7 The life cycle of innovations (Source: Murray, Caulier-Grice and Mulgan 2010)

Manzini (2015), on the other hand, emphasises the processes of building collaborations and networks across a spectrum of actors. These collaborations and networks which can only flourish in interconnected environments, aim to create social, economic, and environmental impact, provide freedom of choice in involvement of members, and enable openness towards other people, ideas, and organisations. From that lens, collaborative organisations are considered key in social innovation and two types exist: grassroots organisations and social

networks. The first revolves around initiatives running in a bottom-up manner by communities in order to resolve local problems (Manzini, 2015). Social networks and social media networks are becoming more and more intertwined and, as such, are improving the effectiveness, replicability and visibility of grassroots organisations while providing deeper meaning for social networks (Manzini, 2015, p.94). Such collaborative organisations can be multifaceted and embrace varying interactions leading to collaborative associations, collaborative services, and collaborative production enterprises. On the long term, in a broader context, these can pave the way for a resilient society: *“in which a society is in capacity of overcoming problems and learning from them, which is different than sustainable society”* (Manzini, 2015, p.192).

For the research endeavours within this work, I combine both perspectives around social innovation. The social innovation model by Murray, Caulier-Grice and Mulgan (2010) informed the PD methods adopted in the case study with traditional organisations (Chapter 5) and with small scale organisations such as 4 all Causes (Chapter 6). Manzini’s perspective on social innovation as a constellation of collaborative organisations in motion served as a lens for the work with 4 all Causes and Gift of Food (Chapter 6) and the work with the grassroots entities underlying the social movement of Lebanon (Chapter 7).

2.5 Participatory design in and for social innovation

PD according to Manzini and Rizzo (2011), offers an assortment of design processes and initiatives which aim to bring together the social and the technical, and, as a result, enables such social innovation to take place. From that standpoint, PD has the ability to create bridges and to diffuse social resources, connecting between digital/technical and social innovation. Such socio-technical innovation requires linkages among the different actors involved in innovation in order to improve the performance of such innovation (Geels, 2004). PD brings in a creative, empathetic, political, ethical, and critical approach when designing sustainable contextualised digital technologies to respond to identified issues (Björgvinsson, Ehn, and Hillgren, 2010). This translates into the notion of ‘democratising innovation’ in design for the greater civic good, which entails granting people from multiple backgrounds access to an array of tools and media and supporting them as researchers to tackle issues that matter to them (Von Hippel, 2005).

As such, the process of co-design at the heart of PD is people-centred and capitalises on strategic design, creativity, and collaboration among stakeholders (even with conflicting perspectives). In his work on co-design for social innovation, Manzini (2015) proposes a design mode map (Figure 2.8) which brings forward coalitions among various actors which he categorises as: 1) grassroots entities, 2) cultural activists, 3) design and communication agency and 4) design and technology agency, leading to the materialisation of emerging cultures of design for collaborative organisations. Designing for and with collaborative organisations entails conceptualising and developing enabling solutions which are products and services responsive to people’s needs. The underlying co-design processes consider people’s abilities such as the “*sensibility, competence and entrepreneurship,*” and “*to design systems that enable them to realise their potential, using their own skills and abilities*” (Manzini, 2007 p.7).

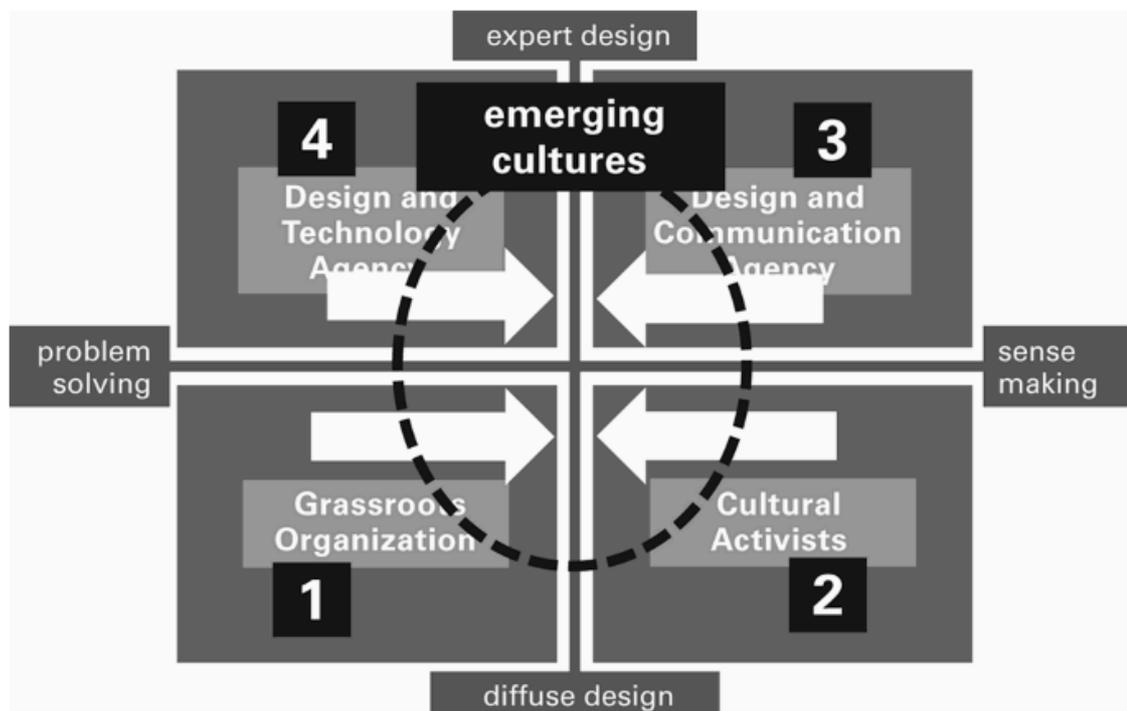


Figure 2.8 Design Mode Map and Emerging Culture of Design (Source: Manzini, 2015)

In addition, Manzini suggests that design has multifaceted functions including sense making, problem solving, activism, and making. These functions are achieved through different processes of design which aim to democratise innovation (Manzini, 2015). The participants involved in the research would then take on the identity of co-designers, especially when we recognise that they are social actors who possess several capabilities, skills, and creativity to suggest and design potential solutions (Manzini and Rizzo, 2011). The work of Ehn, Björgvinsson, and Hillgren, (2010), endorses infrastructuring and brings forward the notion of

'agonistic spaces' through which infrastructuring efforts need to enable participants to share their opinions and concerns. In order to engage in such infrastructuring, key elements need to be in place including: 1) physical space for participants to work together, 2) digital platforms to enable connection and self-organisation, 3) information and assessment services, 4) communication services to understand the motives of collaborative organisations and their envisioned outcomes, and 5) design expert services to support the development of artefacts and services in a collaborative manner (Manzini, 2015, p.163).

While these notions of 'democratisation of innovation' and expanding participation processes are quite progressive, they can be counteracted by a range of challenges which often go back to structural and contextual determinants such as a weakened public and welfare sector, cultural norms, and existing power dynamics that need to be carefully unpacked. An example illustrating this is *The Malmö Labs* (Björgvinsson, Ehn and Hillgren, 2010) which transferred innovation into the public realm rather than restricting it to confined design spaces. Several engagements were held with different immigrant groups in public spaces, which brought obstacles. For instance, while working with young immigrants on integrating their music through technology on public buses, researchers had to negotiate collaboration across different stakeholders with different agendas while attempting to deconstruct the negative community perceptions towards these young people. Researchers also worked with a group of immigrant women and had to deal with power dynamics within the families of these women. Based on this work, Björgvinsson, Ehn and Hillgren (2010) contend that public spaces are constructed with embedded hegemonic structures and the goal is to ensure a multiplicity of voices by transforming such places from spaces of conflict to spaces of constructive controversies with a democratic participation among different opponents. Another example is Open Lab Athens which is an embedded research lab established predominantly to work around infrastructuring activities run by solidarity movements in Greece (Vlachokyriakos et al., 2018). One of the main challenges that the researchers encountered with one of the groups was the expressed scepticism of that group towards the researchers' role and their perception of them as a reinforcement of an existing hegemonic power structure. Consequently, the researchers had to revisit their role as design experts and rather participate in the already existing activities and modalities within that group, to gain trust and be able to develop digital tools to support that group. Even in the design phase of digital tools, the

researchers had to reach a consensus with local stakeholders in order to negotiate the role of technology within that context.

My research does not solely aim to understand conditions for design particularly in a politically, socially, and economically charged context but also examines avenues for civic agency and subsequent transformation. In times of disruptions and uncertainty, existing infrastructures become visible but also new infrastructures surface which in both cases might be problematic. The scope is to explore whether PD can indeed regain its politicised nature and the inherent participation within it can be enacted while staying genuine to its political ideals.

2.6 Context of Lebanon

Lebanon is a democratic parliamentary state with an estimated native population of 4.3 million individuals. The country hosts approximately 1.5 million Syrian refugees in addition to approximately 300,000 Palestinian refugees; registering as such the highest number of refugees per capita in the world (El Jardali, Fadlallah and Matar, 2017). Conflicting political and sectarian divides led to a civil war in 1975 in Lebanon which lasted for fourteen years. As a result, Lebanon witnessed waves of forced migration expanding the size and reach of the Lebanese diaspora (Khater, 2001). Recent estimates of the size of the Lebanese diaspora population range between 12 to 14 million (Skulte-Ouaiss and Tabar, 2015). Dispersed across the Arab Gulf, Europe, South America, North America, and Australia, Lebanese migrants created and preserved networks with each other and with their home country (Khater, 2001). The diaspora was a key player for the development of Lebanon, contributing to multiple sectors and supporting the local economy through remittances, investments, and philanthropy (Khater, 2001). In 1990, the Taif agreement was signed to end the conflict and represented a power sharing agreement reached among political warlords. It led to the dissolution of the militias present in the country, which morphed into an institutionalised sectarianism within governmental entities (Nagle and Clancy, 2019). The agreement ensured that all religious and political factions were represented in the government, endorsing the normalisation of religious and political clientelism within a deteriorating state (Nagle and Clancy, 2019). Foreign players were reluctant to impose a more authoritarian system of rule in the country in fear of upsetting the sectarian balance and, as such, rather than being in transition to democracy, Lebanon found itself continuously consolidating a status quo where sects exerted their control on both the system and on communities (Yom, 2005). Lebanon

reflects the illusion of democracy as participation is problematic especially as democratic practices are not embedded within the country's governmental entities, organisations, and the state (Jansen and Ghribi, 2012). Consequently, the potential for developing more democratic structures is undermined within such a context due to the indirect control of the political system by foreign agendas (Yom,2005).

The plethora of political events cross-cutting Lebanon's history led to the creation of non-governmental organisations (NGOs). The latest estimate of the number of registered NGOs in the Ministry of Interior and Municipalities is from a report in 2015. The report indicates that the number of registered NGOs is approximately 8,000, with 1,100 which are actually operational (BRD,2015). It reports that 60% of these had financial difficulties and 40% lacked sufficient human resources (BRD,2015). The overall number of NGOs is not accurate considering that various NGOs and groups operate without being regulated by the ministry. These NGOs and international aid agencies do not work on changing or re-structuring the existing system with its sectarian intricacies (AbiYaghi, Yamine, and Jagarnathsingh, 2019). The assassination of the former prime minister Rafik Hariri coupled with the withdrawal of Syrian troops from Lebanon was a turning point for the country (Harb,2018). As a response, several young people who were dissatisfied with the status quo and critical of mainstream NGOs established their own NGOs, as well as formal and informal groups and grassroots entities. The build-up of significant political events such as the 2006 war and the 2008 sectarian confrontation between Shia and Sunni political parties galvanised youth into building an 'activist infrastructure' with a political dimension (Khatib and Lust,2014). This infrastructure aims at re-inventing political mobilisation by relying on horizontal models of engagements, decentralisation, multitude of leaders, and looser organisational systems.

2.7 Youth civic engagement and participation in Lebanon

In Lebanon, the official definition of 'youth' is those aged between 15 and 29 years, comprising 27% of the population based on the most recent data from 2014 (YPF,2014). Young people often find themselves excluded from public discourse and are mainly perceived as a burden from an economic, political, and social standpoint (Harb, 2016) or as income-generating emigrants for the country and pride figures from abroad (Harb, 2018). According to Harb (2018), there are three types of youth civic groups: 1) the conformists who endorse the prevailing sectarian rhetoric, 2) the 'alternative groups', who are active in NGOs and 3) the

new 'activists' who are organised into loose grassroots organisations and are more radical in their approach.

Several organisations work with young people and focus on fostering citizenship, capacity-building inter-sectarian dialogue, social cohesion, conflict resolution and human rights (Harb, 2016). Yet often youth find themselves depoliticised or prospects of social/political changes are downplayed by these NGOs. Mainstream political parties in Lebanon mobilise youth (the *conformists*) through the creation of 'youth wings' primarily focusing on social, sports and cultural events (Harb, 2016). Such activities and organisations prepare youth to become future political actors. Yet, many of those youth wings are not youth-led. In contrast, certain self-organised youth groups and grassroots organisations engage in issue-based politics, working towards a secular-based citizenship (Harb, 2018). Others focus on welfare, and on addressing pressing needs related to health, hunger and poverty, education, environment, and human rights, in light of the weakened, fragmented, and clientelist public services, and adopt different mechanisms which they perceive to be novel within their context.

Shifting politics in the country led to the emergence of various coalitions across different structures of civic engagement that heavily relied on social media platforms such as Facebook and Twitter and on communication tools such as WhatsApp and Signal to coordinate and propagate information, to engage in decision-making, and to mobilise people (Harb, 2018). Examples of such groups include the group of activists that launched the Take Back Parliament campaign which soon died out as people were not agreeing on a collective agenda. The 'You Stink' movement which emerged in 2015 as a response to the waste management crisis brought together small coalitions and activists which organised several protests. It predominantly used social media platforms such as Facebook and Twitter to rally and mobilise people. It later transcended into what is known as 'Al Hiraq' (*the movement*), giving more visibility to campaigns, NGO experts, and groups of varying backgrounds that were in their own silos, enabling them to experiment with different tools and forms of activism (Harb, 2018). It brought forward collectives such as Bedna Nhasib (*We Want Accountability*), and Al-Shaab Yurid (*The People Want*). By focussing on topics of contestation, the movement acquired its own political identity which materialised through the formation of the group known as Beirut Madinati (*Beirut, My City*): a group of activists who ran in the municipal elections of 2016 against mainstream political parties (Harb, 2018). The aim was to propose an alternative

secular state rhetoric founded on social justice, equity, inclusion, and people-centred politics (Harb, 2018). However, the group was not able to win the elections but managed to collect more votes than expected, especially in areas which were known to be fully under the control of political parties. The elections also reflected the considerable decrease in voters' participation in general, most notably votes for political parties were less than usual, hinting at the decline in their popularity. While these configurations constituted disruptive mobilisation, they were not durable as a result of demobilisation, fragmentation, political parties' growing influence, threats, and regional politics (Khatib and Lust, 2014).

Positioning this work in existing literature, one of its main contributions is to examine how the inherent principles of digital civics and PD might unfold in a politically charged context with ongoing uncertainty. While the literature highlights the ability of PD to amplify the voices of people and to create coalitions among them, yet more work is needed on how collective agendas founded on collective values might be developed to begin with, particularly in contested spaces. An array of the existing work around PD and service design focuses on public services and reports on research endeavours with governmental entities with aspirations for scale and sustainability. While such work brings forward the tensions of working with such entities, it does not address how such design processes would unravel in the absence of the public sector, and within an intricate web of structural determinants and inequities, which have led to the creation of a parallel structure of service delivery. This work recognises the value of social innovation and the multiple dimensions it involves, especially that in the context of Lebanon social innovation is perceived as a pathway to downplay and overcome the shortcomings of the welfare and public sector. Yet, for such social innovation to materialise, it necessitates scrutinising the existing processes that accompany such a social innovation and examining the prospects of adapting or creating contextual processes which may not align with the Western understanding of social innovation.

CHAPTER 3. EXPLORATION PHASE

“We need an angry generation, a generation to plow the horizons”

Nizar Qabbani (*Syrian poet*)

Upon exploring the relevant literature from different disciplines, I decided that in order to properly plan my case studies, I needed to conduct a preliminary exploration phase. The purpose of this phase was to validate some of the data found in the literature around youth civic engagement and to build my own understanding of the civic engagement ecosystem in Lebanon and prospects of innovation within this space. Additionally, this phase served to build strong connections with certain civic groups in Lebanon which materialised later on into collaborations.

3.1 Methods

I applied for and was granted ethical approval (Appendix A) for a short exploratory study. Through networks I formed from my previous work experience in Lebanon and through a snowball approach, I conducted 26 semi-structured interviews of a length ranging between 30 and 60 minutes, with focal persons (15 females and 11 males) involved in the civic sphere aged between 20 and 35 years old. The interview guide (Appendix C) tackled questions around: the scope, values, and objectives of the organisation of the interviewee; level of youth involvement in the organisation’s activities; challenges encountered by youth in Lebanon; factors that influence youth civic engagement in Lebanon; perceptions around self-organised youth groups; current use of digital tools; and prospects and limitations of digital innovation within this space. From those encounters, several types of configurations were visible, each working in different sectors and engaging youths in various ways. These included local NGOs, grassroots, media outlets, informal groups, scouts, international NGOs and agencies, development consultancy organisations, social enterprises, university clubs, and local clubs operating under the umbrella of an international entity. The areas of focus of these configurations were divided as follows:

- 1) Refugee communities by providing relief services, working on livelihoods, education and capacity building
- 2) Community development projects
- 3) Capacity building
- 4) Entrepreneurial opportunities
- 5) Media
- 6) Service provision to compensate for the shortcomings of the public sector

- 7) Creation of safe spaces for youth
- 8) Sustainable Development Goals (SDGs)
- 9) Political activism

During the interviews, I took exhaustive notes of the points raised by the interviewees. Upon organising and familiarising myself with the content of the notes, I conducted an analysis with a deductive approach by grouping the findings into topical categories which I was interested to know more about in this phase. All participants were assigned pseudonyms to preserve their anonymity.

3.2 Findings: ecosystem of civic engagement in Lebanon

The findings confirmed different types of structures engaging with youths and aligned with the literature. Grassroots, informal groups and some of the small-scale NGOs were youth-led and had a youth-centric identity. Some of the large-scale NGOs, whether local or international, involved youths in the planning and implementation of projects but oversight was done by older adults for guidance and support. In certain aspects of these structures, youths were solely positioned as beneficiaries of services and capacity building opportunities. Moreover, findings highlighted the core challenges encountered and perceptions towards digital innovation.

3.2.1 Unravelling structural challenges

The NGOs' landscape

It was evident that certain challenges were cross-cutting among the different structures while others were specific to particular groups. The interviews revealed that the economic situation of the country had taken a big toll on the work of local NGOs and groups. Resources were deemed limited and with the widening of economic constraints, volunteering was decreasing among young people at the expense of finding paid work instead. This was evidenced by what one of the informants reported *"Some of them leave due to lack of incentives and inability to balance between education and volunteering and a lot prefer to work now in NGOs and gain money"* (Yolla). Interviewees stated that funding was often conditional as it was provided through international donors who were not aware of the actual needs on the ground. International aid processes were criticized by most of the interviewees which, as one of them phrased it *"do not have a holistic approach in dealing with community needs and are often*

dismissive of young people and other vulnerable groups' participation in projects" (Nader). In line with this, informants were critical of mainstream NGOs who often channel resources into administrative spending at the expense of community members. They also highlighted that such NGOs have a hierarchical and rigid organisational structure which negatively impact youth participation. One of the informants reported that in Lebanon, a vast majority of organisations did not have clear transparency and accountability frameworks. While certain organisations had such processes in place, they were mostly reluctant to disclose information about their funds and projects:

"[...] while third sector entities have measures instigated for quality assurance, in the non-profit sector there is a major lack of awareness around that in addition to lack of accreditation and regulatory measures to properly monitor such entities" (Taline).

Certain interviewees reported cultural and linguistic barriers especially in work related to refugees. There was scrutiny about the work of organisations targeting refugees which often resulted in tension with the host community. A key challenge which was cross-cutting was the limited or lack of collaboration between different actors on the ground leading to mismanagement of resources and duplication, and, as a result, minimising the impact of projects.

The existing status quo

In relation to young people, many of the interviewees noted that youths were often disrespected by the wider community as their input and contributions were not taken seriously, and they often found themselves excluded from active political participation. Young interviewees who were part of activist groups explained that the political scene was overruled by a sense of apathy. Although young people triggered social movements during 2015 as a response to the waste crisis, it was short-lived, and they were exposed to massive backlash and smear campaigns which deeply affected their daily lives. The informant described it as follows:

"It is nerve-wrecking to be treated like that, especially around your entourage and co-workers. We were treated aggressively during protests and several people got detained...People would also dig our old Facebook posts and use it against us" (Samira).

This rendered it more challenging to plan for any political activism defying the existing system of Lebanon which relies on clientelism and sectarianism. One of the interviewees alluded to the fact that even in the development and humanitarian sector, there were not enough

projects which tackled policies particularly pertaining to young people. Several of the interviewees agreed that limited monitoring and evaluation coupled with insufficient critical thinking were detrimental to civic engagement within the country. A quotation by one of them illustrated that idea “[...] *in Lebanon, we don’t have the luxury of critical thinking, there is a group of people ruling the country in an illegal way but using institutions to make it look legal*” (Amin).

According to the conversations with some of the informants, people did not realise the value of moving away from an NGO-driven model and shifting to an alternative model which favoured social enterprises, solidarity enterprises, and cooperatives. These alternative structures were deemed to be more sustainable, impactful, and could ultimately lead to a positive transformation of the prevailing socio-economic system. One of the key informants posited that:

“We need to be entrepreneurial and stop opening NGOs for the sake of opening NGOs because other people are doing the same thing you’re doing. They are doing it less efficiently that’s why you’re here, then address it in a different way” (Angela).

One interesting finding that several interviewees mentioned was that the predominant chaos (*fawda*) and exhaustion were main factors which were harmfully impacting civic engagement. According to them, people in Lebanon were constantly drained and in a relentless fight with a complex and corrupted system, making it extremely difficult for them to be actively engaged in social and political processes.

3.2.2 Perceptions of digital innovation

Upon exploring the realities of civic engagement within Lebanon, it was essential to capture the perceptions around digital innovation and technology in that context. Interestingly, informants had similar perceptions pertaining to innovation and technology. They all agreed that most civic engagement structures rely on asynchronous communication tools such as WhatsApp and social media platforms such as Facebook, Instagram and Twitter to run their operations. Issues such as digital literacy, a lack of or poor infrastructure related to internet connectivity, and the attributed high cost were core factors hindering the adoption of digital tools within the non-profit sector. Digital innovation was collectively perceived as being very niche and exclusive to the private and entrepreneurial sectors. The limited technical expertise specifically within grassroots and small-scale NGOs and the high cost of digital technology

prevented such groups from benefiting from digital transformation and advancements within their sectors.

International organisations were perceived to be the main actors with the resources to pursue a digital innovation mandate. Nonetheless, their projects were not necessarily responsive to the needs of the communities due to the processes they relied on. Often such projects were not sustainable because people were not motivated to use digital platforms due to the constraints mentioned in the previous section. As one informant relayed, research which conducted an in-depth examination of people's digital expectations and needs was lacking. Some of the interviewees reported that while there was a trending hype around digital innovation, they believed that live interactions were far more important and needed. They criticised the idea that digital innovation was becoming a priority at the expense of social needs. One of them mentioned:

"[...] the social systems are more important than technology. Coming up with techniques and methods to be able to engage with people across barriers, I'd like people to think more about these issues" (Bassel).

In contrast, other interviewees thought that technology was the way forward in light of current changes around the world, but there ought to be more flexibility in design and more contextual tools should be rolled out. Recognising that digital technology is predominantly privatised and delivered as a product for consumption without meaningful participation of people and a robust social impact, interviewees emphasised the need for participatory processes in the design of such technology. Such processes were regarded as being useful in creating an even more harmonious connection between social movements and technology, as evidenced by this quotation:

"Nowadays, we are discussing how to integrate the relationship between social movements or social/civic groups with tailor made technical tools driven by people and for people. Those digital tools are participatory themselves; they are lean and they adapt to the changing needs of social groups" (Amin).

One interviewee conveyed that the prevailing social systems and infrastructures had to be leveraged when exploring prospects of digital innovation and technology. However, within the current situation, the significant scarcity of resources hindered such an endeavour. People were also perceived as being resistant and too impatient to invest in digital innovation especially if they were able to resort to traditional methods and processes. He noted that:

“[...] mobile digital applications don't seem to be picking up due to the existing digital culture within the country which perceives them to be cumbersome, complex, and irrelevant” (Amin).

In conclusion of this chapter, having explored the existing literature around civic engagement and by conducting my own investigation, I came to the realisation that at the surface, from the standpoint of Korn and Volda (2015), the context of Lebanon seemed to balance between a mix of 'situated participation' with people rallying around common causes and issues, and 'disruption' with short-lived protests that erupted at different occurrences as a response to arising social issues and which were mostly operated through social media platforms. Such movements were short lived due to the hegemonic nature of the existing political system which resorted to different tactics to bring down such efforts that were perceived as a threat to the existing *status quo*. While young people turned to community action as evidenced from my exploration, their participation in the civic life came with restrictions at the level of decision-making, especially if it did not comply with the existing processes and systems. Hence, young people who refused to be part of the mainstream and top-down discourse were keen on challenging it by either creating their own organisations or ad-hoc grassroots initiatives, while being in a constant state of friction towards state actors and mainstream NGOs. In addition, insights from the exploration phase indicated that the private sector and international organisations were the leading entities influencing digital innovation within that space which brought with it a set of inadequacies. Hence, this further emphasised the need to advance a digital civics agenda entailing PD processes while working with the youth civic groups identified. Based on this exploration phase, I was able to plan my first two case studies through some of the connections I made and to pave the way for taking a deeper dive into the internalities of these structures. The third case study was developed in response to the unexpected turn of events and was not part of my initial plan for this research.

CHAPTER 4. METHODOLOGY AND METHODS

“Knowledge without serenity is an unlit candle; together they are honey-comb; honey without wax is a noble thing; wax without honey is only fit for burning.”

Sanai (*Persian poet*)

In this chapter, I present the theoretical underpinnings which are the grounding base of this research. I describe the methodology and the underlying methods that I implemented to address the research question and to conduct the activities on the ground in response to the aims of the research. At the end of this chapter, through a visual representation, I summarise the different cases studies highlighting the different types of engagements which I conducted with my collaborators.

4.1 Theoretical underpinnings

4.1.1 Critical realism

Critical realism (CR) is a meta-theoretical position: a reflexive philosophical stance that informs empirical investigations within sciences and social science (Archer et al.,2016). It positions itself as a middle-ground worldview for researchers. It separates itself from the universalising approach of positivism and its portrayal of humans as passive subjects, while still recognising demi-regularities (withstanding imperfect patterns that take place over a specific spatial and temporal period) (Lawson 1999; Hartwig 2007). It also disassociates itself from the extreme relativist stance which considers that each person’s experience forms a unique reality. CR posits itself as an inquiry into artefacts, culture, social structures, people, political, and economic factors which deeply influence people’s action and their interactions (Archer et al.,2016). From that standpoint, reality consists of underlying structures referred to as ‘generative mechanisms’ and shaped by a subjectivist and transactional epistemology, as both the researcher and those involved in the research are interactively linked while the values of the researcher are unavoidably influencing the inquiry (Guba and Lincoln 1994). This aligns with Scambler’s (2001, p. 35) view that the world *“is not composed merely of events (the actual) and experiences (the empirical), but also of underlying mechanisms (the real) that exist, whether or not detected, and govern or facilitate events.”* CR enquires about reality across different layers and considers knowledge around that reality to be nuanced and articulated based on the interlinkages between those layers (Connelly, 2001). It scrutinises social and political institutions within a context, their roles, processes, and underlying values

and positions empowerment as a central goal of the inquiry. The purpose of CR is not solely to build an understanding of the world but to simultaneously transform it (Connelly, 2001).

In line with the aforementioned, my PhD is organically grounded within CR especially as its research inquiry has its own contestation and political dimensions. CR's paradigm is congruent with the notion of dismantling oppressive discourses and subjecting it to a democratic critique that fosters social justice (Smith, 1998; Collier, 2005). Critical realists are avid believers of social action for change due to both ethical and political reasons (Bhaskar, 1989). The context of Lebanon is a fertile space of contestation where prevailing power structures and generative mechanisms profoundly affect civic engagement and welfare systems. Thus, they are meant to be unravelled, assessed, challenged, and dismantled if needed. Consequently, the research I undertook within that space fulfils a transformational and emancipatory calling.

4.2 Research setting

There are two main settings for my research endeavours. The first setting was in an international organisation in its main headquarters which are located in Switzerland, and I visited two of its local organisations in Ethiopia and Denmark. For anonymity purposes by request of staff members and based on the organisation's policies, I refer to it by the pseudonym International Humanitarian and Development Organisation (IHDO). The second setting was Lebanon, details of the context are elaborated in both Chapters 2 and 3. In Lebanon, I worked with four main partners. The first partner was 4 all Causes: an organisation which focuses on public health and particularly equity in healthcare services (details in Chapter 6). The second partner was a food NGO whose name I choose to anonymise, using instead the pseudonym Gift of Food organisation (GoF). This is related to the fact that the collaboration ended unexpectedly, and I did not want to cause any issues by using the real name of the organisation when reporting my reflections, documented in Chapter 6. My third partner was also a local organisation which operated under the umbrella of IHDO and which also, due to the organisation's internal policies, members have requested that I opt out from using the real name. I refer to it instead as the Lebanese Organisation (LO) (details in Chapter 5). The fourth partner was a solidarity group named Daleel Tadamon (translated as *Solidarity Directory*) which emerged in light of the popular uprisings that were triggered on October 17th, 2019, as a response to the socio-economic crisis that hit the country (details are in Chapter 7).

4.3 Research methodology and methods

4.3.1 Methodologic pluralism

As CR postulates, our view of the world is strongly shaped by historical, social, political, economic, and cultural mechanisms rendering our knowledge around it perspectival and imperfect, as such properly understanding this multi-layered reality calls for methodologic pluralism. The overarching methodology of my PhD is participatory action research (PAR), but I also used both critical embedded ethnography and participatory design as underlying methods to engage with the iterative action cycles of PAR. Mixing methods, coined as 'methodologic pluralism' (Braveman et al., 2011) enables the researcher to engage with complementary methods to grasp the complexities of the context being investigated and deconstruct the knowledge generated from the research endeavour (Johnson, Long and White, 2000). While some consider pluralism as 'method slurring' (Baker et al., 1992), this is mostly valid if the methods in question suffer from philosophical incompatibility, are impractical, or are hard to sensibly combine. I argue that for this research endeavour, from both a pragmatic and critical realist perspective, the questions asked require the interplay of different methods to elicit multiple facets of the reality on the ground. In terms of compatibility, all three methods primarily rely on a qualitative approach and share similar underpinnings around participation, empathy and compassion, social justice, empowerment, and emphasis on socio-political structures that underlie any setting of inquiry. Drawing on different methodological approaches serves to develop a better understanding of the reality and incites action and change (Johnson, Long and White, 2000). Nonetheless, it is pivotal to maintain research rigour through integrity, clear narratives, reflexivity, and constructive critique of one's own work and the work of others while partaking in such pluralism (Johnson, Long and White, 2000).

4.3.2 Research methodology

PAR as a methodology was implemented at both the macro level of the PhD and at the micro level. On the macro level, the needs exploration phase revolves around the exploration of the ecosystem of civic engagement within Lebanon, the action phase encompasses the different cases studies that included different outcomes, and the reflection phase includes reflections around the whole research endeavour. The merit of having a case study research model founded on multiple case studies renders the knowledge, artefacts, and tools generated more transferable and holistic, and expands its reach beyond the immediate people involved

(Frauenberger, Foth, and Fitzpatrick, 2018). At the micro level, PAR was the overarching methodology for the different case studies, but its implementation varied. Within each case study, embedded critical ethnography and PD methods were used differently for data collection due to the disparities across the settings investigated. The details are elaborated in chapters 5, 6 and 7 which are each attributed to a specific case study.

PAR as a methodology is rooted in work conducted in developing countries as a response to structures of oppression within such contexts (Fals-Borda, 2001). Therefore, it is particularly useful as a methodology in controversial or politically difficult situations since it fosters power-sharing between the researcher and participants who become co-researchers (MacDonald, 2012; Gibbon 2002). According to Attwood (1997, p. 2), PAR's philosophy exemplifies:

"[...] the concept that people have a right to determine their own development and recognises the need for local people to participate meaningfully in the process of analysing their own solutions, over which they have (or share, as some would argue) power and control, in order to lead to sustainable development."

It is a collaborative, dynamic and iterative approach involving multiple stakeholders in research processes. It is also deemed a useful and suitable paradigm to inform the design, development, and evaluation of civic technologies because it is balanced between planning, acting, observing, and reflecting (Foth and Brynskov, 2016). While the aim of PAR is knowledge generation, its greater aim is to instil a meaningful change in the lives of people engaged with the research and in the wider context where the research is taking place (Greenwood and Levin, 2006; Kidd and Kral, 2005). From that perspective, PAR aligns with the worldview of CR which portrays the research endeavour and subsequent actions as transformational and emancipatory. In PAR, members of the community of interest are involved in the different stages of research such as goal formulation, method selection, sense-making of the data, and creation of avenues for change within their social, economic, and political systems. Reason (1994, p. 48) affirms this by explaining that PAR serves both for *"knowledge and action directly useful to a community"* and for *"empowerment by conscious-raising"*. PAR emphasises the *"political aspect of knowledge production"* (Reason, 1998, p. 268) as it is geared towards concerns of power and control and it critically examines and re-constructs socio-political and role assumptions which are inherent to traditional research design. In such a research endeavour, the researcher steps back and focusses on working side-by-side with community members. The researcher enables them to tackle encountered challenges while maintaining their ownership over outcomes (Kidd and Kral, 2005). As such, trust and reciprocity are key

elements underlying this relationship (Morrissey, 2017). Thus, effective action-oriented research is time-consuming due to the complexity, multiplicity, and participative collaboration of the activities occurring during the research process. The reflexive nature of the research undertaken often carries with it some ambiguity and vagueness, especially in the choice of methods/techniques, which could encompass interviews and focus groups (MacDonald, 2012), systematic surveys (Camardese and Youngman, 1996), photovoice (Flicker et al., 2008), storytelling, sketches (Ornelas, 1997) and artefacts (Mörteborg et al., 2010).

4.3.3 Research methods

A research method is defined through its scope, perspective and guidelines which are comprised of techniques, tools, and principles for organising a research endeavour (Andersen et al., 1990). For the sake of this research, both embedded critical ethnography and PD were used as methods for data collection for different stages of PAR's action cycles. The underlying principles of those two methods render them synergistic when exploring the design space for social innovation and technological implications.

Embedded critical ethnography

Embedded critical ethnography shares similar value underpinnings as PAR, as its overall aim is not only to understand how values, beliefs, and behaviours of a particular group are moulded, but to also stimulate action within that space. From that lens, the researcher becomes the research instrument, particularly in an embedded ethnography in which researchers must "*submit to the fire of action in situ*" (Wacquant, 2004, p. viii). This immersive experience in fieldwork requires adaption in ethics, relationships with collaborators, research regulations, and new forms of ethnographic outputs (Lewis and Russell, 2011). Yet, it is pivotal before undergoing such an experience to consider research restrictions in terms of funding, time, and resources, which might artificially and inevitably interrupt relationships developed in the field (Murphy and Dingwall, 2007). The assimilation process that the researcher goes through while working with a community often creates some confusion around the relationship with members of the community (Davies, 2008). This relates back to the principle of 'fair exchange' through which story- and experience-sharing is not restricted to community members but necessitates the researcher's full engagement by sharing their own lived experiences (Morrissey, 2017). This presumably results in more ethical and intimate research

which could also entail transgressing certain personal and professional boundaries (Wang, 2013).

Contending the multiple risks of such embeddedness, it can be highly valued within organisational settings. In an organisation that is establishing itself, the researcher becomes a catalyst for change by providing 'formative' insights (Lewis and Russell, 2011). When an organisation has been running for a considerable length of time, it becomes more challenging to pursue such a research approach as sensitivities might arise, noticeably if shortcomings of the institution are highlighted. In that case, at the conceptual level, conducting such critical ethnographic work does not necessarily mean finding answers but, as argued by Dourish (2014, p. 12), focuses on "*raising questions, challenging perceived understandings, giving silenced perspectives voice, and creating new conceptual understandings.*" Thus, the researcher needs to be cautious in how activities are being conducted and should provide members of the organisation, including people in leadership positions, the space to be the ones pushing for organisational changes (Lewis and Russell, 2011). The adoption of such an embeddedness urges the researcher to establish practical boundaries, unpick socio-cultural nuances, remain critically aware of the encountered scenarios, and politically situate themselves.

Participatory design

According to Manzini (2015), design for social innovation consists of a constellation of social conversations for action. It is particularly aimed at surfacing and consolidating new social forms and alternative economy within contexts. From that perspective, the design process becomes a critical, creative, and dialogical collaboration by involving key actors working towards sustainable change (Manzini, 2015). Hence, design for social innovation aligns with a critical realist worldview and shares PAR's action-oriented approach. I contend that PD is complementary to both PAR and embedded critical ethnography especially if adopted for design for social innovation. Traditionally, PD work is affiliated with a constructivist and situated epistemology paradigm (Suchman, 1987; Harrison, Sengers, and Tatar, 2011; Haraway, 1988). It rejects positivist expectations and its inherent generalisability. Nonetheless, PD as a field has metamorphosed from its original inception that was exclusive to the workplace, by shifting towards localised community-based projects. In addition, this transition that PD has witnessed has opened the space for a new framing of PD within critical realism (Frauenberger, Foth, and Fitzpatrick, 2018). From that lens, PD becomes action oriented and

aligns with PAR, since instead of being cloistered to an isolated small-scale project or initiative, it becomes a process for wider societal changes. Taking this further, PD becomes a medium to scale up and out by collating knowledge from different levels to build a more holistic and nuanced understanding of a specific reality (Frauenberger, Foth, and Fitzpatrick, 2018). Due to its underlying values and qualitative approaches, similar to both PAR and embedded critical ethnography, PD as a design field is uniquely positioned not necessarily to find solutions for unsolvable challenges but to better work within uncertainty and explore unknown territory (Frauenberger, Foth, and Fitzpatrick, 2018). Additionally, by engaging in PD, the researcher's role transcends facilitation especially by becoming embedded within the community of interest and lending innovative or radical ideas for social action. The analytical sensibility which the researcher relies on is crucial to develop a better understanding of tacit knowledge (Blomberg and Karasti, 2012). Accordingly, mutual learning can be achieved through design engagements by creating opportunities for potential members to realise the possibilities and limitations of resulting technology (Mörtberge et al., 2010).

In summary of this section, I advance that PAR, critical embedded ethnography, and PD are interlinked by similar values, researcher's roles, and qualitative approaches and aim towards surfacing and transforming 'generative mechanisms' underlying the context of interest. Embeddedness was a key factor in the implementation of the overall methodology and underlying methods for richer insights and more effective and potentially sustainable actions. Nonetheless, my embeddedness varied in each case study due to the nature of the organisation I had to work with as elaborated in the corresponding chapters. Yet, I managed throughout my PhD journey to document from an ethnographic lens the varying structures and dimensions of civic engagement and political activism within Lebanon.

4.4 Data collection

Data collection was divided into two main stages: one stage was related to IHDO and took place over the course of four months and the other stage took place in Lebanon over the course of three years, encompassing six phases.

STAGE 1: data collection with IHDO

This stage entailed observation at the premises of the organisation. It also included observation in two local organisations that operate under its umbrella in Ethiopia and

Denmark, semi-structured interviews with staff members of those organisations, and workshops using PD techniques with youth volunteers; capturing as such data through the resulting material and recorded discussions.

STAGE 2: data collection in Lebanon

Phase 0: this was the first ethnographic exploration of the ecosystem of civic engagement by conducting 26 semi-structured interviews with multiple civic groups, organisations, and civically engaged individuals.

Phase 1: this phase entailed the identification of 4 all Causes and collection of data to better understand their identity, scope, and needs through both active observation and participatory design workshops.

Phase 2: in this phase, additional PD workshops were implemented with 4 all Causes to support the development of their internal manifesto and to explore the solution space for the identified challenges. Additionally, semi-structured interviews were conducted with the founder of GoF and with staff members of LO to explore the prospects of collaboration and future activities.

Phase 3: this phase included PD workshops which led to the appropriation of a mapping platform for 4 all Causes and negotiating partnerships between them and other stakeholders. Data was compiled through discussions, material produced, and observed. In this phase several meetings were held with the founder of GoF providing substantial observational data but eventually the collaboration came to an end. Additionally, two workshops relying on PD techniques were held with LO and data was collected through the produced material and recorded discussions.

Phase 4: this phase came after the uprisings that took place during October 17, 2019 which led to the ongoing Lebanese social movement. It entailed observation of solidarity structures and grassroots activities both online and offline. It also included semi-structured interviews with activists and members of the Lebanese diaspora, and one PD workshop with one of the solidarity groups, Daleel Tadamon (*Solidarity Directory*).

Phase 5: this phase was the reflection and feedback phase during which semi-structured interviews were conducted with members of 4 all Causes to capture feedback about the process and the research endeavour. It also encompassed discussions with staff from LO and reflections from the team behind Daleel Tadamon.

4.5 Data analysis

Each case study included its own methods and techniques due to variability in circumstances, hence the details of data analysis pertaining to each case study and the extent of involvement of collaborators in the process will be described in the corresponding chapter. Nevertheless, there were some cross-cutting aspects of data analysis. As data analysis was conducted concurrently with data collection, I was dealing with diversified data but in limited amounts, which is why I chose to do the analysis manually. Personally, being the one conducting the engagements, I already had a preliminary understanding of the potential findings and analysing the data manually felt more truthful to the data at hand which is why I opted out from using software. This perhaps would not be the case if the analysis was left until the end of my PhD and I had to go through massive amounts of data. Doing this progressive analysis was necessary since each phase of data collection was dependent on the people involved and informed the subsequent phases. Since a lot of the engagements involved discussions and interviewing, those were recorded using a password protected smartphone dedicated to the research project. The recordings were then transferred to my own personal laptop and deleted from the recording device. The conversations were transcribed verbatim and translated to English where needed by myself and with the assistance of a trusted freelance transcriptionist whom I personally knew. Other types of data such as online data, fieldnotes (Appendix D), and material produced during the sessions were also analysed. Throughout, the data compiled was thoroughly analysed through an iterative inductive thematic analysis (i.e. bottom-up which entails extracting meaning out of the data collected). Thematic analysis is a flexible and accessible method for analysis. It enables the researcher to systematically identify, organise, and extrapolate meaningful patterns across the data set resulting in themes (Braun and Clarke, 2012). As such, the researcher is able to make sense of the experiences reported and particularly engage with its idiosyncratic meanings. The flexible nature of thematic analysis enables the researcher to either explore meaning across the whole data set or pay particular attention to a specific aspect of the experiences explored (Braun and Clarke, 2012). Both semantic and latent meanings can be surfaced depending on the research questions and

the aims of the research. For my analysis, I used highlighter pens to identify relevant quotations and assign codes to them. Upon revising and familiarising myself with the codes, I wrote the codes on sticky notes and grouped similar codes together. From each set of sticky notes, I was able to extrapolate key themes.

Overall, my analysis was three-fold. The first stage was progressively analysing data upon the completion of each data collection phase which sometimes entailed working with different organisations at the same time. The second stage was combining the relevant parts of analysis for each case study separately to ensure the coherence of the final analysis outcome per case study. The third stage of analysis was examining all three case studies and their sub-analyses together to extrapolate the final reflections around this work.

4.6 Ethical considerations and rigour

Maintaining rigour throughout the research endeavour is pivotal especially when engaging with methodologic pluralism. This rigour is achieved by adhering to explicit standards of research conduct (Johnson, Long and White, 2000). Nevertheless, it does not imply adopting rigid procedures in the research process, especially as research flexibility is required from both critical realist and pragmatic perspectives. Some argue that conformity to documented research procedures is a key element of rigour as it consequently supports the conformability of the research (i.e. the findings of the research can be corroborated by other researchers) (Robson, 2002). Yet, conducting research while relying on data collection and analysis processes that are not necessarily emergent of the context of interest can result in a certain messiness in research; justifying, as such, adapting and mixing multiple methods. In that case, the researcher becomes accountable in thoroughly documenting the process followed, justifying research decisions which are grounded in the realities encountered, and being explicit about the shortcomings of that research (Holloway, 1997). For my research, I resorted to multiple techniques for data collection, I also cross-checked findings by engaging with different focal people and organisations and compiled different types of audio-visual and tangible material to be able to consolidate the final findings of my research while positioning it in existing literature and being truthful about my own biases. While doing so, I made sure to have an 'audit trail' which implied having a factual record of any research decision taken and its consequences as a process to maintain research rigour (Lax and Galvin, 2002).

From an ethical stance, I knew as I embarked on this research journey that I, as Pihkala and Karasti (2018) claim, would be overwhelmingly implicated in the research as a result of the entanglements within the context of my research. The social world is inextricably historical, context-dependent, and entangled in power relations (Archer et al., 2016). Ethical dilemmas arise and need to be carefully navigated to avoid unintentional mistakes such as deception, misrepresentation, or violation of ethical standards (Angrosino, 2007 and Neuman, 2003). Therefore, a research inquiry in a particularly challenging context with its own intricacies necessitates considerable ethical considerations (Neuman, 2003) including: caution by avoiding risks and not inflicting any form of harm on myself or the people I work with; protection of people's privacy and anonymity where needed; and creation of safeguards to mitigate for undesirable effects of the research and upkeep of reflexivity throughout the work.

As the research evolved, each phase of data collection required its own ethical procedures, including different consent forms for each phase (Appendix B), both formally by obtaining approval from the university's designated ethics board and informally by being self-conscious of the ethical and political aspects of the social situations in which I found myself embedded. Thus, I made sure throughout that any workshop and session conducted were a safe space for people engaged to express and criticise. In the interviews and meetings conducted, I ensured that the identity of the people involved was concealed especially when conversations were about delicate matters. Photos of participants in workshops were only taken upon their written consent and I maintained full transparency in reporting my findings to those involved before dissemination. As mentioned earlier, I deliberately took the decision to use pseudonyms for certain organisations either because I respected their wishes in keeping their name anonymous or because I felt the urge to protect their reputation as some of my findings might be perceived negatively. I knew that by taking such a decision, especially as my collaboration with one particular NGO ended due to unfortunate reasons, I would avoid any backlash if my findings were misinterpreted. This in itself was an ethical dilemma to navigate, especially because I had their consent to use the name of the organisation, but I was not able to share with them my final reflections around the work I conducted with this NGO as I had to limit our contact.

4.7 Positionality

Being a citizen of Lebanon and having experienced this context first-hand over several years through my social, academic, and career journeys, I knew that it was too personal for me and neutrality would not be possible. As the literature points out, especially from the lens of positivist and post-positivist discourses, neutrality is desirable, yet it is not possible in social science including in public health (Bhaskar, 1989; Connelly and Worth, 2018). While there is an ongoing debate regarding the extent of neutrality within a research endeavour, on several occasions and contextually, adopting a less neutral stance generates far more enriching insights (Smith and Stewart, 2017).

I acknowledge that I was at an advantage since I already had my established networks which enabled me to conduct my exploration phase and identify potential collaborators. My own opinions about the system in Lebanon, my social inclinations, and having family and friends rendered this research an integral part of my life; it transcended from PhD research to a mission that I had to fulfil to improve the state of things in my home country and defy the status quo. I found myself keen to conduct those research activities, especially as I was able to plan, implement, and assess subsequent actions; actions that were strongly needed even when unrelated to the PhD. Being so deeply involved in my research, I did not perceive the people I worked with as participants but rather as co-researchers, and some became close friends, meaning I found myself with a bigger role at hand. As a researcher, I am both accountable and responsible for my practices and my research decisions. Singleton and Straits (2005) point out, by going 'native,' the researcher tends to overidentify with the group and potentially loses sight of their role, considering that their own values and attitudes infer certain bias. This immersion leads to difficult negotiations that need to take place especially when the impact is on the social lives of members. Since the work I am engaged in is heavily connected to tacit generative mechanisms and power structures, eliciting those structures while being active in circles that look to detangle the latter, incited me to reflect at various instances and practice reflexivity.

Reflexivity is a means through which qualitative researchers in particular are able to disclose their own effect on the research endeavour and nuance the differences between the researchers and the people involved in the research (Johnson, Long and White, 2000). A key aspect of reflexivity is also to surface the influence of the context of study and wider structural

elements on the research beyond the personal interactions. According to Bourdieu and Wacquant (1992), reflexivity entails having a 'critical attitude' vis a vis the theory, methods, and practices underlying the research. This criticality serves to further strengthen the rigour of the research. As such, as I delved more and more into my research project, I had to be self-critical of my practices and my own behaviours, and navigate the interplay of power dynamics within my research. I documented my own thoughts, critique, and emotions through a research journal. This enabled me to unpick my own frustrations towards some of the realities on the ground and the unexpected outcomes I had to deal with and subsequently inspired me on how to move forward beyond that.

In conclusion of this chapter, I provide a short description of the methods used in each of the case studies which are further elaborated in their designated chapter, and provide a summary table (Table 4.1) with an overview and details around each setting, organisation, data collection methods, tools used, my role as a researcher, and outcomes.

Case study 1: in this case study I report on my work with IHDO and the two local organisations within Ethiopia and Denmark. I relied on a short-term embedded ethnography by conducting observation, semi-structured interviews, and workshops in which I used PD techniques. In that same case study, I report on the work I conducted with LO which operated within IHDO where embeddedness was not possible and in which I relied on observation, semi-structured interviews and workshops using PD techniques.

Case study 2: in this case study, I report on my long-term engagement with 4 all Causes and my collaboration with GoF. With 4 all Causes, I used both embedded critical ethnography through observation, meetings and semi-structured interviews, and PD techniques in the workshops. As for GoF, I was only able to conduct embedded critical ethnography through observation, meetings, and one workshop.

Case study 3: in this case study, I report on my work around the Lebanese social movement that was triggered in 2019. It incorporates a mix of embedded critical ethnography in both online and offline grassroots, self-organised spaces, and PD techniques used with the solidarity structure Daleel Tadamon.

Case Study	IHDO	Lebanese Organisation (LO)	4 all Causes	Gift of Food (GoF)	Social Movement (2019)/Daleel Tadamon
Aim of case study	Designing for youth engagement and social innovation within large-scale organisations		Designing for and structuring social innovation within youth-led organisations		Designing for social innovation and solidarity
Type of organisation	Large-scale		Small-scale		Grassroots
Area of focus	Community development and humanitarian assistance		Public Health	Food security	Social, economic, and political conditions and welfare
Youth	Volunteers and beneficiaries		Youth-led, self-organised and community based		Youth-led and self-organised
Setting	International: Switzerland, Ethiopia and Denmark	National: Lebanon	Local: Lebanon	Local: Lebanon	Local and transnational
Digital ecosystem	Interest in advanced tools (i.e VR)	Digital constraints	Off-the shelf tools including social media		
Data collection methods	-Observation Ethiopia: -4 workshops -3 semi-structured interviews Denmark: -1 workshop -8 semi-structured interviews	-Design workshop with admin team and design workshop with volunteers -3 meetings with staff members	Phase 1: -Observation -2 design workshops Phase 2: - 4 design workshops Phase 3: -2 design workshops	-Observation -1 workshop -Meetings with founder and assistant -Meetings with possible partners for GoF	-Observation -8 semi-structured interviews with local activists -Mapping of online platforms on social media

			Meetings		-1 design workshop with Daleel Tadamon -8 semi-structured interviews with diaspora members
Tools	-Spiral Exercise -Journey map	-Journey map -Challenge affinity diagrams	-Spiral Exercise -Journey Map -SWOT -Persona -Stakeholders web -Loomio: digital probe -Paper prototyping	SWOT	-Ecosystem Mapping -Website development
Challenges	Top-down approaches and issues related to digital infrastructure and literacy	Top-down approaches and issues with digital literacy	Shifting circumstances of Lebanon and funding restrictions	Lack of proper participatory practices and	Shifting circumstances of Lebanon and conflicting agendas among stakeholders
Researcher roles	Research fellow	Facilitator	Facilitator Advisor Mediator	Facilitator Mediator	Facilitator Mediator Activist
Main outcomes	Recommendations for youth engagement and innovation strategy	Communication structure	Manifesto 4 all Causes community map	Collaboration terminated	Co-founding social innovation hub

Table 4.1 Overview of different case studies with relevant details

CHAPTER 5. DESIGNING FOR YOUTH ENGAGEMENT AND INNOVATION

WITHIN LARGE-SCALE NGOS

“Never hesitate to go far away, beyond all seas, all frontiers, all countries, all beliefs.”

Amin Maalouf (*Lebanese-French author*)

From the literature review and based on my own exploration, it was clear that certain organisations with international aid mandates are predominant in developing regions such as MENA. These organisations constitute a main pathway of service delivery, relief, and development in such contexts. Recognising the power of such organisations in Lebanon as evidenced in the background section, it was pivotal to explore further an example of such organisations. The International Humanitarian and Development Organisation (IHDO)² is one of these mainstream organisations with national entities dispersed across the globe, and working closely with governments on humanitarian services and development projects. In addition, it has the biggest pool of youth volunteers in the world. Recognising that IHDO has a Lebanese national entity which is the biggest in the country and that it plays a significant role in health services delivery, community development, and humanitarian relief, I decided to approach its global headquarters. My initial engagement with the headquarters of IHDO provided me with an opportunity to observe youth engagement and prospects of innovation through a comparative lens across different contexts before I zoomed in on the context of Lebanon. In line with research aims one and two, this case study aimed to explore the organisational dynamics within large scale and mainstream organisations which work with young people and engage youth volunteers. In addition, the purpose was to unravel the facets of the participatory culture within such institutions and the implications on design for youth social innovation channelled towards service delivery and community development within such spaces.

5.1 Background

Organisational efforts to advance innovation have exponentially increased within development and humanitarian sectors. Engaging in co-design processes around ICT for socio-economic development (ICT4D), specifically in low- and middle-income countries, entails substantial political and ethical dimensions. This is because often the designer/researcher

² The name of the organisation was anonymised based on the request of the staff

comes from a privileged background in contrast to the communities they may be working with (Kendall and Dearden, 2020). While various ICT projects entail linguistic and cultural tweaks to render them more contextualised (Dearden and Rivzi, 2008; Bartindale et al., 2019), members of communities of interest often find themselves pressured into using digital tools developed by organisations which fail to assess usability, usefulness, and sustainability (Dagron 2003). Zamenopoulos et al. (2019) argue that people need to be actively and adequately involved in the design process, which in turn enables them to have more control, become critical of their surroundings, and develop the skills and capabilities needed to properly shape the environment in which they live. As such, rather than being project-focussed, the whole endeavour becomes transformational. Development and humanitarian organisations often fail to capture those nuances when it comes to the design and promotion of digital technology and innovation more broadly. Hence, social innovation which is organically occurring in certain communities of interest can go unnoticed. Nonetheless, a paradigm shift at the institutional level by embedding a participatory design approach can be positively transformative by enabling organisations to surface existing social innovation, structure it, and propagate it. The aim would be to gradually reform, consolidate or challenge existing frames within institutions (Huybrechts, Benesch, and Geib, 2017). In order to achieve such an aim, it is pivotal to recognise that those involved in the design process as co-designers are already enmeshed in an existing web of power dynamics and relationships which need to be carefully navigated (Bratteteig and Wagner, 2015).

5.2 Context of study

Based on the literature and my own research interests, I was particularly intrigued to explore in-depth the space for participatory design for youth social innovation channelled towards service delivery within the setting of a big and more traditional NGO. I had the opportunity to be a research fellow with the innovation team of IHDO for 3 months. The process started by finding an intersection between my own research interests and the interests of the team I was working with at the international organisation's headquarters. While they were interested in exploring global insights from volunteers around youth volunteering and mobilisation for strategic purposes, I was trying to investigate the possibility of developing participatory processes in line with a participatory design and digital civics agenda. I was fully aware that the team wanted to promote digital innovation and potentially surface social innovation within national organisations that were under the mandate of their organisation. Three

contexts were selected by the team and myself: Ethiopia, as it has a large pool of youth volunteers and was undergoing important political changes; Lebanon, since I am Lebanese myself and had already done research activities within that context; and Denmark, for comparative reasons between developed and developing settings. For both Ethiopia and Denmark, the team wanted the engagements conducted within a short time-frame. In contrast, for Lebanon, the engagement lasted longer since the national organisation became a separate collaborator for my PhD. For all three contexts, there was no open call for participation and volunteers who participated in workshops were selected by staff members.

5.3 Methods

5.3.1 Ethiopia and Denmark

In Ethiopia, four workshops (two hours long each) were conducted with a total of 32 youth volunteers, aged between 18 and 35 years old. A staff member accompanied me and interpreted from Amharic (the national language in Ethiopia) to English and vice versa. Three semi-structured interviews were conducted in English with staff members from the Ethiopian national organisation. In Denmark, I conducted one workshop of two hours with eight volunteers, five semi-structured interviews with staff members, and two semi-structured interviews with other key informants connected to the organisation. The workshops had a similar structure for consistency and to document how the same process could be interpreted differently in different contexts. Each workshop included a priority-setting exercise; this consisted of a spiral drawing in which volunteers organised what they perceived as their priorities in descending order from most important (in the centre) to least important (on outer layers) (Figure 5.1). The second part of the workshop involved building a journey map (Figure 5.2) for a project/service of their choice, highlighting the main challenges encountered, assets, and tools used. Building on the journey map, challenges were clustered, and volunteers were asked to suggest a list of recommendations for their own local centre, the national organisation which oversees the centre and IHDO.

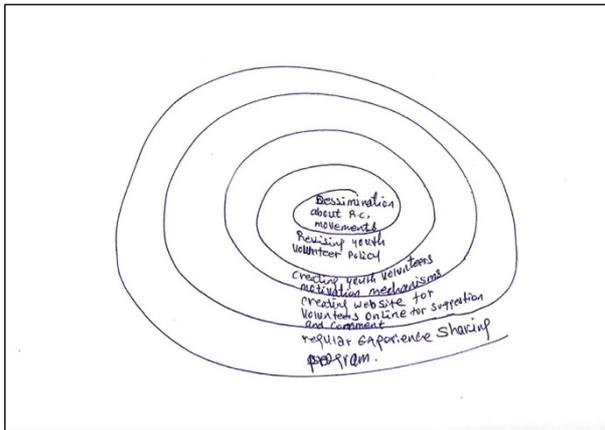


Figure 5.1 Example of Spiral Exercise



Figure 5.2 Journey Map by Volunteers

For the semi-structured interviews, the interview guide (Appendix E) was developed based on the interests expressed by the innovation team at the headquarters of IHDO. It was primarily targeted at capturing current practices, challenges, and tools used by staff and volunteers of the different national organisations. It also included more focused questions around processes within the organisations (i.e., inclusion of young volunteers at the decision-making level), perceptions towards digital technology and its future use, and recommendations that could feed into the future strategy of IHDO.

5.3.2 Lebanon

The engagements in Lebanon span a longer period of time since it was my primary context of interest and I had already done some initial exploration. Several meetings were held with staff members to discuss their possible needs and to explore the space for social innovation. One of the directions included working with 4 all Causes (Chapter 6) on their community map and expanding the concept, but that partnership did not materialise due to conflicting agendas. At a later stage, the staff members decided that working on the youth department's communication structure was a key priority and considered where digital technology might be leveraged. A four-hour participatory workshop was conducted with administrators, programme coordinators, and the director and assistant director of the youth department. A total of 17 people attended the workshop. The activities of the workshop were different from the ones held in Ethiopia and Denmark since in contrast to those countries where I had full control of the content of the sessions, the staff members in Lebanon wanted specific activities to be implemented. For the first activity, the participants were divided into three groups; each

group was assigned a scenario for a specific activity and had to visually depict the communication structure (example: Figure 5.3).

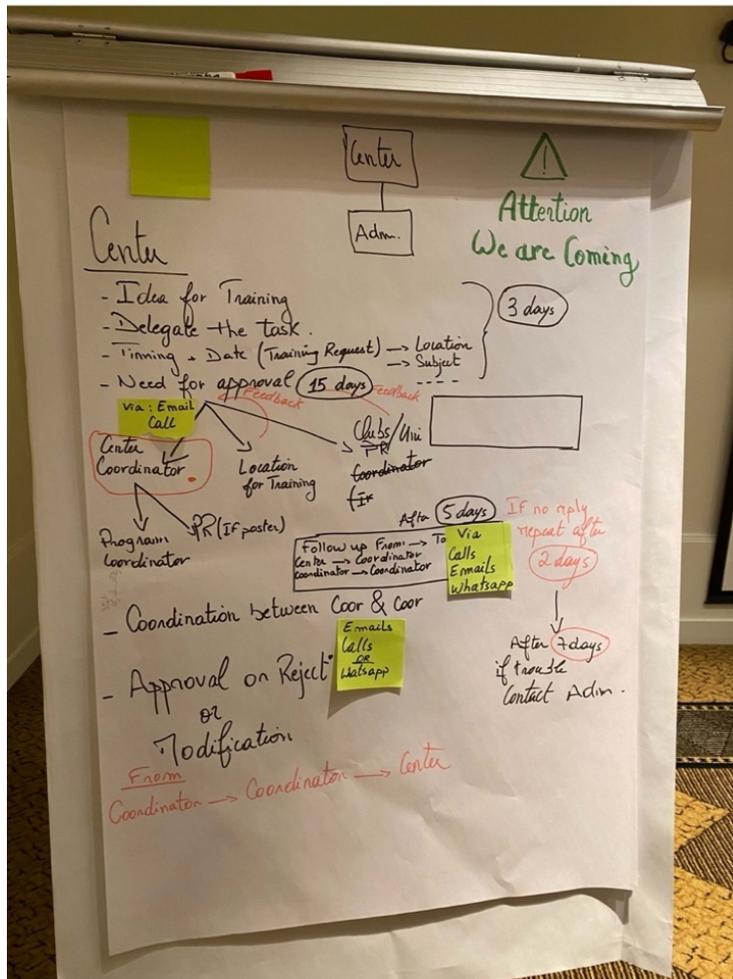


Figure 5.3 Example of visual representation of communication structure

Similar to the journey map exercise, it had to include the different stages (from the receipt of the activity proposal to receipt of approval), people involved, tools used, and duration of each step. Upon completion of the group work, the participants presented, and an open discussion took place around the different presentations. As for the second activity, each participant was asked to specify three challenges (two internal and one external) related to the communication within the department. The objective was to highlight areas that could be improved. After a round of discussion around the challenges, they clustered them into categories.

Perceiving the interaction and feedback from that session, the staff members wanted to replicate the same workshop with different youth centres across Lebanon to capture their

insights about communication particularly focussing on challenges and commonly used tools in order to design a proper structure and tools at later stages. A workshop was conducted in one of the centres and they relayed back to me the main insights from it. However, while the plan was to continue with these engagements, due to the COVID-19 pandemic, they had to discontinue activities and the department's efforts were instead channelled towards raising awareness around COVID-19. After the Beirut blast which devastated the city and incurred massive losses (BBC, 2020), I reached out to the staff of the department and had a detailed call with a member of the organisation to have a better understanding of the situation on the ground. In addition, the head of department conveyed that they did not have the capacity to engage in any further projects as they were mostly working based on other departments' instructions, including the distribution of food parcels and hygiene kits for those affected.

5.3.3 Analysis

All discussions in the workshops and the semi-structured interviews were audio-recorded. Apart from the workshop discussions in Ethiopia, all others were transcribed verbatim and in the case of Lebanon translated to English since the discussion was in Arabic. As for the workshops in Ethiopia, notes were taken from the recordings which were based on the live interpretation that the staff member was relaying to me. For this case study in particular, the thematic analysis was deductive in comparison to the others as I already had a pre-conceived notion of the topics to be investigated. The overall purpose of these engagements was to unpick insights around youth volunteering within such spaces, perceptions relating to innovation and specifically the prospects of a participatory design agenda within such organisations. Three stages of analysis took place: the first stage was after the engagements in Ethiopia and Denmark in which similar tools were used, the second stage occurred after the engagement in Lebanon which included different tools, and the third stage was to compare and contrast across the three contexts and identify cross-cutting themes. I resorted to triangulation across different sources of information to support validity of the analysis within and across contexts since I had observational notes, interviews with staff members, and workshops with volunteers in the three contexts. All those who were involved in the different activities were assigned pseudonyms.

5.4 Findings

Findings provided an introspective look at the organisational culture of participation from within the organisations under IHDO's mandate and provided an understanding of current perceptions and barriers towards digital innovation which is closely intertwined with prospects of youth-led social innovation. They also served to tacitly explore the possibility of implementing participatory design tools in order to advance more participatory approaches in conducting work within such large scale and conventional NGOs. Findings were grouped under the following cross-cutting themes: 1) surfacing the organisational culture around youth participation across contexts, and 2) constructing a space for youth social innovation.

5.4.1 Surfacing the organisational culture around youth participation across contexts

Denmark

While participation was exemplified in a context such as Denmark where young people were more accustomed to active participation as voiced out by all interviewed individuals, multiple subliminal shortcomings were brought forward. Despite having young people in different positions within the local organisation in Denmark, the underlying structure and processes were still criticised. One of the focal people alluded to the weaknesses of the organisation particularly in engaging young people in leadership:

"[...] we often have a very top down approach that we come with a project and we need volunteers to fulfil the goals of that project; but we have already made the design and the layout and the setup and everything...The last thing is that I think that our volunteer management approach as a movement in general is focused very much on databases and organising and rules and policies and strategies and there is very little of what I call activity leadership" (Christopher, Denmark).

Some of the volunteers expressed that young people who were engaging with the organisation needed to be more diverse and more opportunities of participation needed to be created to attract those who were not necessarily at an advantage, subsequently increasing their sense of local ownership towards the organisation. : *"[...] we want local ownership and what we risk is to lose some of the people who aren't with their social background inclined to go to this organisation's work" (Amanda, Denmark).* Other volunteers conveyed that there has to be more flexibility at the decision-making level in responding to young volunteers' contributions:

“Sometimes we face the challenge of the lack of the possibility of being independent that we always want to talk to the Headquarters or someone to get approval, we do not have that free space to do what we want to do” (Mark, Denmark).

Additionally, they expressed that they appreciated having similar participatory sessions like the one that was conducted in the future since it enabled them to properly voice out their concerns. In contrast, some staff members claimed that they already actively supported participation of young volunteers, opened the space for their self-expression, and noted that they developed programs for those classed as vulnerable members of the society. Yet, those youths were portrayed as beneficiaries rather than being actively engaged from the inception phase of a project. One staff member raised the point that youth volunteers were often sidelined because they were not properly recognised or were perceived as a threat. This was noted also from the work they did with the other national organisations from other countries in which the roles of young people were also undermined as expressed by the staff member:

“[...] the youth become so resourceful that they are actually in some way, they become a threat and they will be recognised as the potential new leaders; so sometimes it’s quite difficult to position youth in decision making because some places they will be reflected as not resourceful and in other places a bit as a threat” (Talar, Denmark).

Ethiopia and Lebanon

Ethiopia and Lebanon were similar in their top-down structures and had more pronounced hierarchical approaches. It was quite problematic to push for more participatory approaches within these contexts. I was faced with responses by staff members such as *“European methods do not match current processes within developing settings like our country, we do things differently”* (Majida, Lebanon). Another staff member highlighted the idea that there was not proper investment in building capabilities of youth volunteers in Ethiopia to take on more key roles: *“We are a country with low financial capacity, so we do not invest much in volunteers in the country, so the young people need guidance and cultivate the sense of volunteerism in their mind”* (Banu, Ethiopia). For the sake of the engagements, I tried emphasising the importance of involving young volunteers in the process of designing online and offline tools to facilitate mobilisation and service delivery and, consequently, the need to have only young people participate in the workshops. However, in Ethiopia for instance, heads of centres were adamant on being part of the sessions, which I had to refuse to enable the participants to freely express their opinions and reflect their concerns. The threat would have been to have curated content that did not necessarily reflect the realities on the ground nor

the actual expectations, needs, and capabilities of those who are not in a position of power. Similarly, in Lebanon, staff members were keen on managing the session which we held around communication and were downplaying some of the concerns that the youth volunteers raised around existing processes.

Additionally, in both countries, staff members conveyed that they were often placed at the recipient end of the spectrum, as projects were usually transferred from national/local organisations based in Western countries. This was evident, as the volunteers and staff from the Denmark organisation had stated that they conducted international projects in various developing countries including both Lebanon and Ethiopia. Consequently, while this was framed as experience and learning-exchange and was a predominant culture of IHDO, ownership of the projects was often blurred and inclusion of local knowledge into the design of projects was disregarded. This was evidenced by a quotation from a staff member of the organisation in Lebanon: *“We always get projects from abroad and we are happy to learn from each other but we do not necessarily have much to contribute to the planning as we are more on the implementation side of things”* (Majida, Lebanon).

5.4.2 Constructing a space for youth social innovation

Re-examining the organisational structure

When prompted about the comparison between self-organised youth organisations and the organisations of IHDO in terms of service delivery, few of the staff members alluded that these self-organised and grassroots groups were flourishing, as expressed by one of them: *“I think we’re going to see that the big NGOs are getting more and more competition from small, more agile, more dynamic, more flexible NGOs or collections of people”* (Christopher, Denmark).

Another staff member from Ethiopia echoed that by stating that:

“[...] youth are becoming more structured and doing things differently than from our organisation because it has a lot of bureaucracies and people help them because they are directly connected to the communities and their response to needs is more geographically concentrated and targeted while we have to cover a wider area, so our services aren’t as visible and aren’t as appealing” (Ted, Ethiopia).

These statements underlined the idea that youth were becoming more and more inclined to create and lead their own entities due to the agility, easy access, and horizontal nature of such structures. Furthermore, while discussing the engagement of volunteers in service delivery and their overall mobilisation, certain staff members and focal people were adamant that the

current structure of their organisation needed to be reformed in a manner that coupled attributes of both self-organised and traditional organisations. This would pave the way for better experiences of youth volunteering and consequently service delivery. One of the staff members expressed it as follows:

“[...] even though the self-organised communities they rapidly make their own rules or their own documents; I think if we can be something in between, something really old and bureaucratic and something really modern and rapidly evolving then we can survive the future as well and have a place in there” (Tim, Denmark).

Volunteers in both Lebanon and Ethiopia in particular noted that as a consequence of rigid organisational processes and structure, their organisations might be missing out on interesting ideas and innovative modalities of operation and service delivery that other groups or actors might be engaging in. One of the volunteers mentioned:

“[...] in our same community, there is another organisation working and they are more advanced than us and have a lot of funding and equipment which we could also benefit from but we can't work with them because there are so many restrictions and requirements from our organisation” (Adam, Ethiopia).

Barriers to digital innovation and transformation

IHDO was keen on pushing an agenda promoting digital innovation aimed at transforming modalities of operation and service delivery within humanitarian contexts. In all three contexts, digital innovation was perceived as important but not necessarily needed due to an array of barriers related to digital literacy, physical infrastructure, and culture.

In Denmark, known to be more advanced digitally, members of the organisation were reluctant about the adoption of digital technology including social media, its familiarity, and common use. Some of the staff stated that they were trying to distance themselves from social media platforms on a personal level and did not wish to deal with it on a professional level. *“For me Facebook for example is a social tool, I do not want it to become part of my professional life, it is already too much exposure”* (Viviane, Denmark). Yet, in contrast other staff members expressed that it was inevitable to use social media tools which young volunteers were resorting to in planning and implementing projects: *“we can never compete with big brands as Facebook where you can make events, you can gather up, you can get your message out in no time, and for us as staff we can get in contact with a lot of people basically in no time”* (Tim, Denmark). For some of the youth volunteers, they emphasised the importance of maintaining the physical interaction but wanted to have more visibility and to

take advantage of what digital technology has to offer: “[...] *there are all sorts of communication tools now, it is exploding, and we need to be more adventurous and take advantage*” (Michael, Denmark). This in its turn highlighted the inter-generational differences that could influence the course of digital innovation. Likewise, to volunteers in Denmark, one of the volunteers in Lebanon believed that it was necessary to capitalise on existing digital tools and to provide training opportunities related to social media platforms to further increase community trust:

“[...] they have to properly invest in capacity building in social media training and in social media pages management for dissemination and awareness around different topics to attract more youth to join and increase trust of the community” (Aida, Lebanon).

In both Ethiopia and Lebanon, digital literacy was a major obstacle, especially given that those organisations brought together various age groups and socio-economic backgrounds. One of the staff members in Lebanon noted: “[...] *we do not have organisational consistency in digital literacy, we have all age groups, and it is hard to have digital strategy and have tools that work with everyone because it is not an organisational decision yet*” (Samira, Lebanon). In the case of Ethiopia, a large number of young volunteers were themselves from deprived communities that benefitted from services of the organisation, meaning that they also lacked the required digital literacy. Another hindrance was the lack of infrastructure in both Lebanon and Ethiopia. Many of the local centres operating under these organisations lacked equipment such as computers and smart mobile phones or did not have access to internet due to cost or lack of coverage. One of the volunteers in Ethiopia conveyed “[...] *we need to have accessible resource centres that are equipped with computers, internet connection, library and sources of entertainment (indoor/outdoor games)*” (Yonas, Ethiopia).

In Lebanon, particularly, during the COVID-19 pandemic and relief post the Beirut Port blast, when prompted about experiences with digital tools, there were concerns raised around the shortcomings of such tools when used for service delivery. Examples such as a GIS survey mapping tool and Microsoft Teams were criticised for either not always working due to poor connectivity or as a result of access barriers because they required organisational registration. One of the volunteers explained:

“[...] at times the map was not working, and updates were stuck so maybe using Google maps would have been better but the survey was fine as it required 10 minutes. We mostly relied on WhatsApp, email and Google forms to get the work done. Tools such as Microsoft Teams were challenging as it required an account so instead we used to Google-meet because it is free” (Linda, Lebanon).

5.5 Discussion

Adaptation and contextualisation of the PD process

Considering that the research was commissioned by the head organisation, and was time-bound, it brought forward limitations pertaining to a participatory process especially as it prevented me from familiarising myself with the contexts of Denmark and Ethiopia. In Ethiopia specifically, language was a very significant barrier to build a 'genuine' participatory process. Throughout the sessions with young volunteers, a staff member accompanied me for translation purposes and to build rapport. The limitation was in my restricted ability to control the flow of the session or content as I was not certain of the interpretation and what was being told to the volunteers. This is a sensitive issue in cross-cultural research in which the primary researcher does not speak the language of the community, predominantly because the researcher on the ground cannot be certain about which concepts and/or words might be differing across languages (Temple and Young, 2004). Moreover, the researcher cannot truly assess the abilities of the interpreter in capturing the context behind some of the statements being made (Squires, 2009). It was obvious at instances that the discussion was shifting from the original purpose, making it difficult for me to steer it back to the points of interest. This put me in a position where I was trying to achieve a balance between maintaining a participatory process and fulfilling the assigned research agenda, while being parachuted into an unknown context.

In contrast, the activities with the Lebanese organisation extended over a longer period of time, and I already had a strong familiarity with the context and the organisational culture within. Yet still I was not able to follow the intended plan of activities due to the interference from the staff members who wanted to drive the session in a specific manner. Mainstream and large-scale organisations often mimic existing power structures within a country under the pretext of 'knowing what is best for their people/communities' as noted specifically in the contexts of Lebanon and Ethiopia (Kendall and Dearden, 2020). Nonetheless, even if an organisation is operating within a democratic context, covert internal hierarchical exchanges and power struggles still exist and transactional and tokenistic modalities of operations are explicitly manifested when working with other countries. This is particularly the case when working with under-developed or developing countries as evidenced by Denmark's external programmes. Hence, across these contexts and by working with IHDO, the ideological

mismatch was overtly visible. Designers are often more inclined towards establishing flat structures and participatory processes without restrictions, while in contrast institutions rely on complex hierarchies and decision-making processes. In addition, the internal politics and low-risk actions are frequently favoured over change (Kendall and Dearden, 2020). PD as an approach needs to be clearly explained to members of organisations and even if a process is perceived to be participatory by such organisations, it does not necessarily qualify as PD.

In all three contexts, members agreed that partnerships with other stakeholders were essential and already occurring, yet processes to establish such partnerships were not very clear and relations were often problematic. Issues of duplication, competition and lack of communication and coordination were raised as key challenges. These were attributed to the fact that certain stakeholders perceived the local/national organisations as being very top-down and non-participatory in their approach. Large institutions inherently possess a vertical structure in contrast to smaller or grassroots organisations, where a horizontal structure is easier to establish and maintain due to the smaller number of actors. Moving further towards a PD agenda on a larger-scale, development agencies need to build coalitions that rely on relational and horizontal exchanges rather than transactional ones with other actors of a local context. Such relational exchanges manifest by firstly recognising that they are partners and not solely recipients of guidelines and funding, therefore, they are only responsible for implementation rather than being involved across all phases of a project. This entails conferring a decision-making power to such partners, particularly ensuring that participation in any project is equal among all parties involved. It is not sufficient to provide them with a space to participate but to also enact agency and take control if needed, specifically if they are more aware of the contextual needs. This paves the way for the sustainability (i.e., impact and operability over time) of any development project as stakeholders come together with a wide array of resources and skills, facilitating the development of a sense of ownership (Kendall and Dearden, 2018). This being said, within any context power dynamics are difficult to navigate but as researchers, we have to actively create such opportunities and conditions for dialogue.

When considering a PD agenda for the development of digital technology that supports organisational processes, service delivery and even social innovation, it is essential to examine what is known as the 'installed base' (Karasti, 2014). This refers to existing socio-technical

infrastructures within a context. While advancing digital innovation is currently a big agenda within the humanitarian and development sector, projects and plans are often too optimistic or unrealistic. Various contexts are not ready for massive digital transformation for infrastructural reasons, but also because people are more likely to use tools they are already familiar with in both their social and professional lives (Kendall and Dearden, 2020). Researchers must ensure that members of organisations grasp the importance of developing contextualised tools rather than engaging in a one-size-fits-all solution. Exploring the digital literacy and expectations of members of organisations and any community is an important pre-requisite before pushing for any digital tool or project. Sometimes offline modalities prove to be more effective in achieving desired outcomes than digital ones. A key element to draw mainstream organisations' attention to is the existing social innovation occurring within communities. The shortcomings that such organisations might be suffering from can be resolved by learning from the underlying values and processes behind such social innovation. Hence, the goal would be to create an infrastructure that could support and propagate, where the overall design process becomes a mix of design with and for communities (Manzini, 2014).

In summary, this case study aligns with some of the findings from previous work around ICT for development and working more broadly with mainstream, large-scale and hierarchical organisations (Kendall and Dearden, 2020; Rainey et al., 2020; Bartindale et al., 2019; Irani et al., 2010). This case study addresses the first research aim by reflecting a cross-cultural understanding of youth engagement and providing an introspective look into mainstream organisations. While some of these organisations are well intentioned, the introduction and/or reform of institutional frameworks for them to become more relational and participatory is a multi-faceted challenge. Referring back to the third research aim, the attempts to infuse some of the 'democratic' and 'participatory' ideals of participatory design within that space were perceived by those particularly operating within developed settings, to be another way of imposing a Western modality of operation rather than relying on existing processes. Nonetheless, existing processes reflected significant shortcomings in terms of youth participation in designing services and in decision-making. This case study also responds to the second research aim by exploring one aspect of civic engagement, which is the most prevalent pathway in Lebanon. By working with LO, an organisation with a long-standing history in Lebanon, it enabled me to assess one type of organisations which is large in size, based on a hierarchical structure, and covers diverse fields of intervention. Contending that

these types of organisations are predominant in the context of Lebanon, which is the primary context of interest, extensive negotiations, and adaptability of a hybrid model of design and engagement are required, to slowly start shifting the organisational culture within such structures.

In comparison, I had to investigate the other type of youth organisations which emerged as a response to the practices of such hierarchical organisations. According to the literature and the exploration phase, such youth-led organisations and groups posit to be constructed around participatory and bottom-up approaches, independent of political and sectarian influence and to be more adequately responsive to community needs. Hence, I decided to work with two small-scale, youth-led organisations in order to further explore this claim and assess the prospects of surfacing and structuring their social innovation through participatory methods.

CHAPTER 6. DESIGNING FOR SOCIAL INNOVATION WITHIN YOUTH SELF-ORGANISED GROUPS IN LEBANON

“Out of suffering have emerged the strongest souls; the most massive characters are seared with scars.”

Gibran Khalil Gibran (Lebanese writer, poet and visual artist)

Building on the previous chapter, this chapter encompasses a single case study comprising of two narratives around collaborations with two distinctive youth-led and self-organised NGOs that provide services: 4 all Causes and Gift of Food (GoF). These organisations contend that they present a different and innovative model of civic engagement within the context of Lebanon, with promising long-term outcomes in reducing existing inequities and challenging the existing clientelist and sectarian rhetoric in welfare and access to services. Through this case study, I depict the experiences with both entities, thoroughly describing the process developed with each, reporting findings, and discussing and reflecting on these engagements.

6.1 Context

Lebanon has been through extensive historical and political instability due to conflicts, displacement, geopolitics, and economic challenges imposing strains on the healthcare sector. The weakened infrastructures and governmental leadership have led to an unregulated proliferation of NGOs and non-state actors to fulfil health service delivery, affecting the standards of quality of care (El Jardali, Fadlallah and Matar, 2017; Sibai and Sen, 2006). The resulting healthcare system is considered fragmented and pluralistic as it combines both public and private means for financing and the provision of services (Ibrahim and Daneshvar, 2018). The health system relies on various sources of financial coverage for the population including ministry of public health (MoPH), national social security fund, governmental schemes (e.g., civil servants’ cooperative) and private insurance.

The influx of refugees has incurred additional substantial burdens on healthcare services and finances. On the positive side, this has led to further expansion of the primary healthcare centres’ network across the country, especially as more international aid was channelled to respond to these emerging health needs (El Jardali, Fadlallah and Matar, 2017). Nonetheless, the political turmoil of the MENA region has exacerbated existing economic challenges within Lebanon, which has struggled with fiscal deficits and public debt. With the engrained institutional corruption underlying subsequent governments and in the absence of proper

reforms and governance, the responses to the pressing health needs of the population often lack sustainability (El Jardali, Fadlallah and Matar, 2017). As a result of the sectarian control over welfare systems, Lebanon's clientelism-based model has made public resources subject to pre-established sectarian allocation (El Jardali, Fadlallah and Matar, 2017). Within this model, while by law the MoPH is the planner, supervisor, regulator and evaluator of the health system and healthcare, the scarcity of resources coupled with the government's general lack of vision and investment in the public healthcare sector has diminished the role of the MoPH (El Jardali, Fadlallah and Matar, 2017). The ministry often does not have legal authority over some of the funds poured into the health sector by various stakeholders with their own political agendas.

Within this context, in the absence of a welfare state, both local and international organisations often end up endorsing the existing sectarian and top-down political status-quo (AbiYaghi, Yammine and Jagarnathsingh, 2019; Jones, 2011). Considering that the NGO sector plays a crucial role in service delivery in Lebanon and is the predominant model of civic engagement as described in Chapters 2 and 3, research within that space comes with its own particularities. Research conducted in that context around the use of digital technologies particularly for service delivery indicated challenges with the integration of technologies particularly within the public sector (Talhouk et al., 2020). Few attempts led by donors and academic institutions have been able to integrate m-health and e-health technologies that were based on mobile phone use in order to improve the quality of care (Yassin, Khodor and Baroud, 2018). Other projects entailed providing healthcare providers with e-learning material and promoting online peer to peer exchange (Hanafi, 2017). In addition, few pilot projects were conducted within refugee camps including an eHealth tool such as a netbook application to enable community health workers in their health screening procedures (Saleh et al., 2018). Nonetheless, these studies do not engage in participatory design approaches and are mostly targeting primary healthcare centres and private healthcare centres without the involvement of communities and the wider social determinants of health. In terms of service delivery, certain youth-led groups tend to implement their own participatory practices with communities they work with, which demonstrate examples of social innovation.

In addition to healthcare services provision, food security is a key area of focus in service delivery in Lebanon. Food insecurity is highly prevalent in the MENA region as a result of

prominent social inequalities, limited agricultural production, high dependence on food imports, economic stressors, and political instabilities and conflicts (Breisinger et al. 2012). Upon the end of the civil war in Lebanon around 1989, social welfare programs that were once established by militias metamorphosed into institutionalised welfare agencies with networks and social centres. In contrast, as mentioned earlier, various non-state actors emerged and sectarian political parties - perceived as facilitators of entitlements for citizens - started providing aid related to health, education, food, and financial assistance. Food and cash were particularly heavily distributed for electoral purposes in exchange of support referred to as “turnout buying” (Nichter 2008). In 2015, Lebanon adopted the SDGs agenda, including SDG 2: “end hunger, achieve food security and improved nutrition, and promote sustainable agriculture.” Nonetheless, Lebanon is strongly import-dependent for food and while maintaining a reasonably sufficient food supply, access to food is significantly jeopardised during price shocks (ESCWA, 2016). Recent data indicates that approximately more than half of the population in Lebanon are living below the poverty line set by the World Bank³, accounting for the refugee population (WFP, 2020). While the situation was already precarious, since October 2019, the national currency has suffered an 80% devaluation and by June 2020, an increase of 109% in food prices (of which are 85% imported) was recorded by the World Food Programme. Compounding factors such as COVID-19, the political unrest, the uprisings of 2019, and the economic crisis have severely affected livelihoods and food security. In a survey conducted by WFP (2020), around 50% of Lebanese respondents were concerned about food availability and access.

Consequently, the existing welfare system which is predominantly politicised and discriminatory, coupled with uncertainty and volatile realities, have urged citizens, noticeably youth, to create their own models of service provision to alleviate the burdens of such as system and address existing inequalities. Among these organisations are 4 all Causes and Gift of Food.

6.2 Journey with 4 all Causes

Based on my own exploration (Chapter 3), I identified ‘4 all Causes’ which in 2015, was formed as a group (registered in 2018 as an NGO) of young public health practitioners aiming to

³ <https://www.worldbank.org/en/news/video/2017/04/14/what-are-poverty-lines>

provide better health advice and awareness to marginalised communities in Lebanon. This is achieved by supporting local community-based organisations (CBOs) and coalitions across different regions through various projects. Acknowledging the major gaps in primary health services, especially in areas outside Beirut, they aim to ultimately achieve better health outcomes at the development level and in terms of poverty reduction (4 all Causes Facebook Page⁴). Defying the challenging socio-economic and political factors in Lebanon, 4 all Causes abstains from having any political or religious affiliation even if it leaves them at a disadvantage in comparison to similar NGOs. Through their work, they propose a model of service provision which is deemed to be a social innovation by decentralising healthcare provision and connecting public health and medical volunteers to disadvantaged communities. Consequently, this alters transactional modalities of care provision and challenges the clientelism model of the Lebanese welfare system. While the group is officially registered as an NGO, it possesses qualities of a Community Based Organisation (CBO) due to its adamant pursuit of social justice and equity in service delivery coupled with agile processes, and a heightened sense of communal responsibility among volunteers (DiSalvo, Clement and Pipek, 2013).

6.2.1 Methods

Contending that the research is anchored in PAR, in order to implement the different phases of PAR (explained in Chapter 4) my process included embedded critical ethnographic methods such as participatory observation and reflection, and action cycles typical in PAR research (Kidd and Kral, 2005; Moser and Korstjens, 2018). Action cycles were unfolded through the utilisation of PD methods and techniques that aimed to consolidate 4 all Causes' expertise on issues on the ground and my own as a digital civics' researcher. This enabled me to envision my role as a design researcher and the role of digital technology in supporting youth-led social innovation in Lebanon.

Embedded critical ethnography

I conducted introductory meetings with 4 all Causes active group members, highlighting the aims of the research project. Building rapport with the group was key to facilitate the process

⁴ <https://www.facebook.com/4allcauses/> - In the case of Harvard referencing for websites, you can supply an in-text citation which includes author, surname, year rather than a footnote. The referencing list at the end will include full information.

of this research. Members perceived me as an asset; an opportunity to introduce digital innovation. Therefore, I felt that our goals coincided since we were looking at advancing a participatory and collaborative process to infrastructure and propagate the work of such organisations through online and offline mediums. Upon explaining the participatory approach, I enrolled as a volunteer, a role that would allow me to get a richer understanding of the organisation's day-to-day activities and needs. As the first phase of PAR, this entailed carrying out observations and keeping field notes during these activities. My role of 'active participant' entailed intensively immersing myself within the environment of the participants to develop a strong familiarity with the group (Moser and Korstjens, 2018).

Participatory design

The ethnographic pursuit unravelled elements that warranted further exploration through participatory design workshops. The double diamond model for design thinking⁵ (Figure 6.1) inspired the process as it aligns with the phases of PAR: needs' exploration (Discover/Define), planning (Develop), and action (Deliver). Both rely on iterative and reflective processes in order to achieve outcomes.

⁵ Retrieved from Design Council UK: <https://www.designcouncil.org.uk> - Again, this information can be given as an author, surname, year in-text citation with full information given in the reference list.

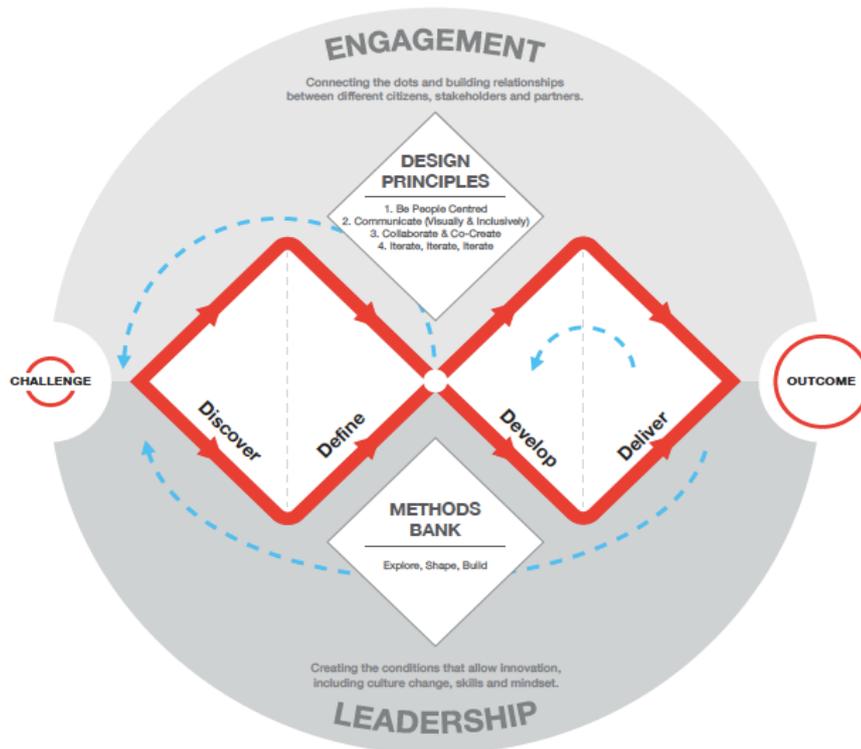


Figure 6.1 Double Diamond Model (Source: Design Council UK)

Five phases of engagements were conducted (Figure 6.2). The discussions took place in Arabic, but any written material was produced in English as members were more comfortable writing in English. This is a contextual aspect of Lebanon’s NGO and grassroots sector as many people tend to speak in Arabic but use either English or French for writing. Board members were the main attendees of the sessions, and they invited most active volunteers to be part of the sessions. However, throughout the process not everyone who was involved in the process was able to attend all of the sessions.

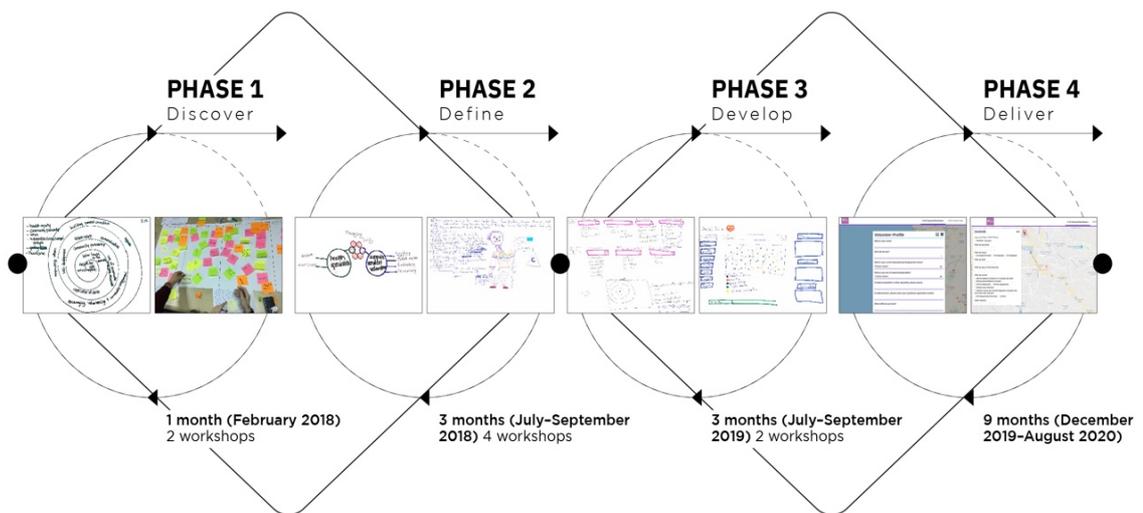


Figure 6.2 Process Diagram combining PAR action cycles and the Double Diamond stages

Despite initial concerns that the envisioned process was not necessarily reflective of 4 all Causes' current organisational practices (which mostly relied on meetings) the workshops provided the space for a balanced dialogue between members of the organisation. As a researcher, I planned and organised the first workshop's activities (among all phases of workshops), aiming at inquiring into the role of technology in supporting the participatory and horizontal self-organisation of the youth-led structure. Subsequent workshop activities were collaboratively developed as the conversations evolved, tackling different topics raised by the members of the group, and shifting the inquiry into more organisation-related issues. The intertwining of methods enabled me to create a participatory process which led to action both internally and externally to the organisation. I was able to draw implications on how PD can be enacted in spaces where coordinated participation is not evident and how it could potentially support the infrastructure of social innovation that aims to re-configure service provision.

6.2.2 Process

Phase 1: Discover

The overall purpose of this phase was to have a better understanding of the organisation and its intricate aspects as an entry point to where technology could play a significant role. For this phase, observation, meetings and two workshops were conducted.

Workshop 1 and Workshop 2: Deconstructing identity and scope (10 members, 9 members respectively).

This first workshop was the roadmap for subsequent workshops. It was evident from the observation that the group had uncertainties around their identity, values, and main priorities in their practices. The first workshop included a conversation starter which I devised; inspired by an interaction design module I had taken. Members were asked to draw a spiral (Figure 6.3) and write down core pillars of 4 all Causes with most significant pillars at the centre and the least significant pillars being on the outer layers. From there, it was necessary to break down the group's practices as a way to understand their identity and scope, and the implications on future design. They were asked to go through a journey map⁶ (Figure 6.4) to explore in-depth the phases of their project cycle, including: inception, preparation, implementation, evaluation, and next steps. For each phase, they mapped out main assets, challenges, digital tools they use, their likes and dislikes about the phase in question. The second workshop encompassed a SWOT⁷ (strengths, weaknesses, opportunities and threats) analysis (Figure 6.5) as an easy familiar and clear way to summarise the main priorities and issues that the group wanted to focus on and as a framework that could be used to guide subsequent workshops.

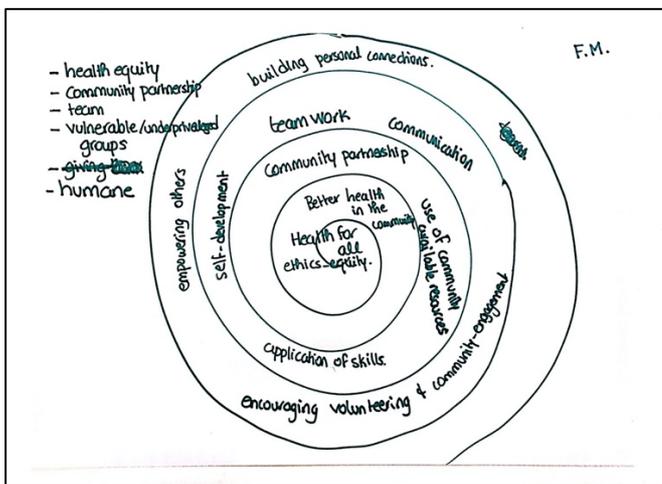


Figure 6.3 Spiral Exercise



Figure 6.4 Journey Map

⁶ <https://servicedesigntools.org/tools/journey-map> - See my previous note about in-text citation of websites.

⁷ <https://diytoolkit.org/tools/swot-analysis-2/>

expectations and roles that volunteers need to fulfil. The main activity was building personas (Figure 6.6) reflecting the profiles of volunteers who would fit the group. Each persona included the character's values, role, gender, age, expectations, motivation to join the group, personal fears, fears related to 4 all Causes, digital tools used, and their life motto. Persona⁸ was selected as a method as it pushes people to assume a certain identity and role and act accordingly, and is therefore commonly used in service design. The discussion was intriguing as multiple contradictory opinions surfaced, leading to an additional session around this topic.

Workshop 5: Visualising the group's internal/external structures (6 members)

Having explored the values of the group, their practices, challenges, and volunteers, I decided that it was important to understand how these are tied together through the group structure (Figure 6.7). This also resulted from comments made in previous sessions around the group having a horizontal structure. It was equally important in this workshop to map out partners that 4 all Causes currently work with and potential ones they might work with as this had implications for the impact and sustainability of their work. The members and I had a common agreement that this would facilitate a holistic understanding of how the group is currently operating and how it should capitalise on certain alliances in the future for sustainability.

Workshop 6: Constructing the manifesto (10 members)

The last workshop of the second phase aimed to build on and consolidate the previous sessions. It enabled the group to formulate their 'manifesto' by determining their: vision, mission, key objectives, activities, volunteers' profile, and main partners. In order to facilitate the process, Loomio⁹ - an online organisational platform - was used. The idea of introducing Loomio within that session was to demonstrate the ability of a digital tool to serve as an organisational tool which enables and facilitates conversations between people collaborating remotely and asynchronously. It was explained to the members that Loomio (Figure 6.8) is a tool which could be used to draft and share proposals within the board and with volunteers, support voting on major decisions, and monitor attendance at meetings.

⁸ <https://servicedesigntools.org/tools/personas> - see my previous note about website referencing.

⁹ www.loomio.org

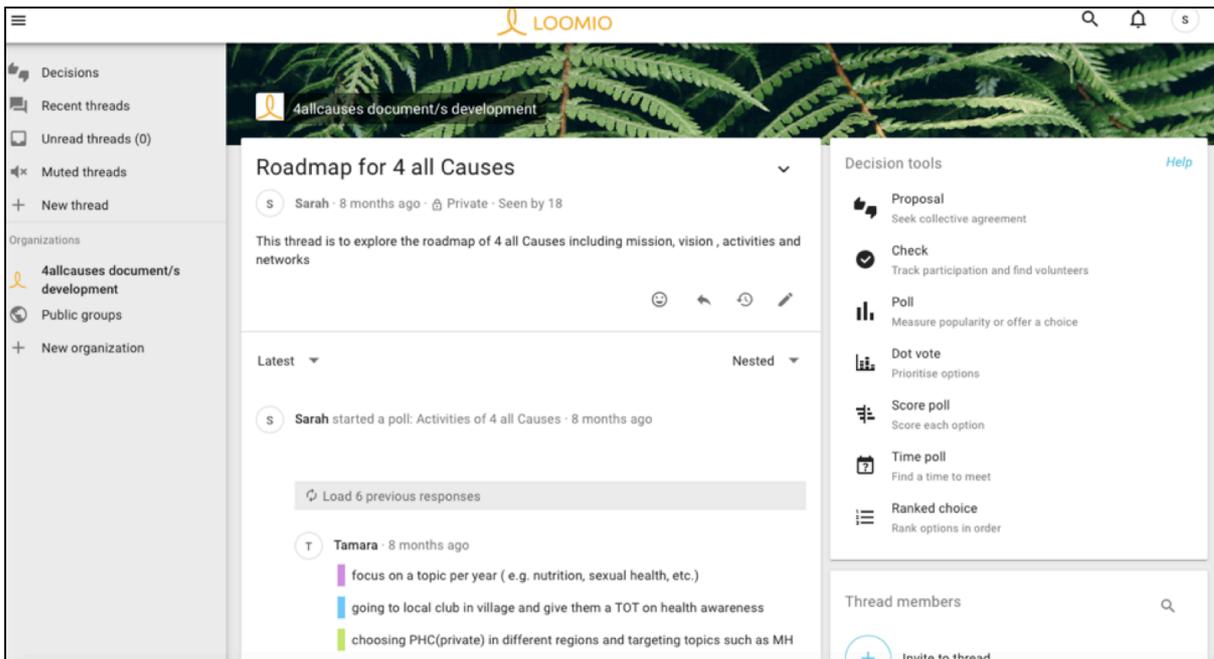


Figure 6.8 Loomio Workspace

Phase 3: Develop

Having developed their manifesto (Appendix F), the next phase was to explore ideas for digital technology that would support the organisation’s practices while preserving the identity and structure it had established.

Workshop 7 and Workshop 8: Ideation for digital tools (5 members, 9 members respectively)

Based on the discussions that were taking place throughout, members of the organisation were particularly interested in mapping medical services and service providers across Lebanon. They were keen to have a tool that would visualise information about available health centres and services, aiming to facilitate access for people who did not know about these services and to fill gaps where needed. They engaged in an ideation exercise by sketching paper prototypes (which was suggested as a conventional technique of PD) (Figure 6.9) of how the mapping tool would look, including its main features. Having discussed the different ideas, the next part of the workshop was to test a mapping tool developed by Open Lab (Make Place Lebanon: <https://lebanon.make.place/#/>) which encompassed several of the features discussed. The members created profiles and experimented with the platform, providing feedback on how they might use such a tool or how they could see it come to life.

During this phase and prior to phase four, subsequent meetings were held with only three board members to tailor the final content of the mapping website based on the requirements of the organisation. Acknowledging the importance of this endeavour in consolidating data

about health services across the country and in order to optimize the use of such a tool through well-established online/offline processes, solid alliances were also required for sustainability. I was able to connect 4 all Causes with staff members of the Branch Development department of Lebanese Organisation (LO) (from Chapter 5) who had expressed interest in mapping and conducting thorough needs' assessment in different regions. There were ongoing discussions on how the collaboration might materialise and how they could exchange expertise, particularly given that LO had extensive financial resources, a national reach and already had some data collected in a particular region. However, later events that occurred in the country halted those discussions as priorities were diverging between the two entities. I also liaised the board members of 4 all Causes with two consultants who were interested in mapping medical services and creating a system which supports in identifying and rating doctors across Lebanon. This also was not pursued further due to personal circumstances affecting the consultants.

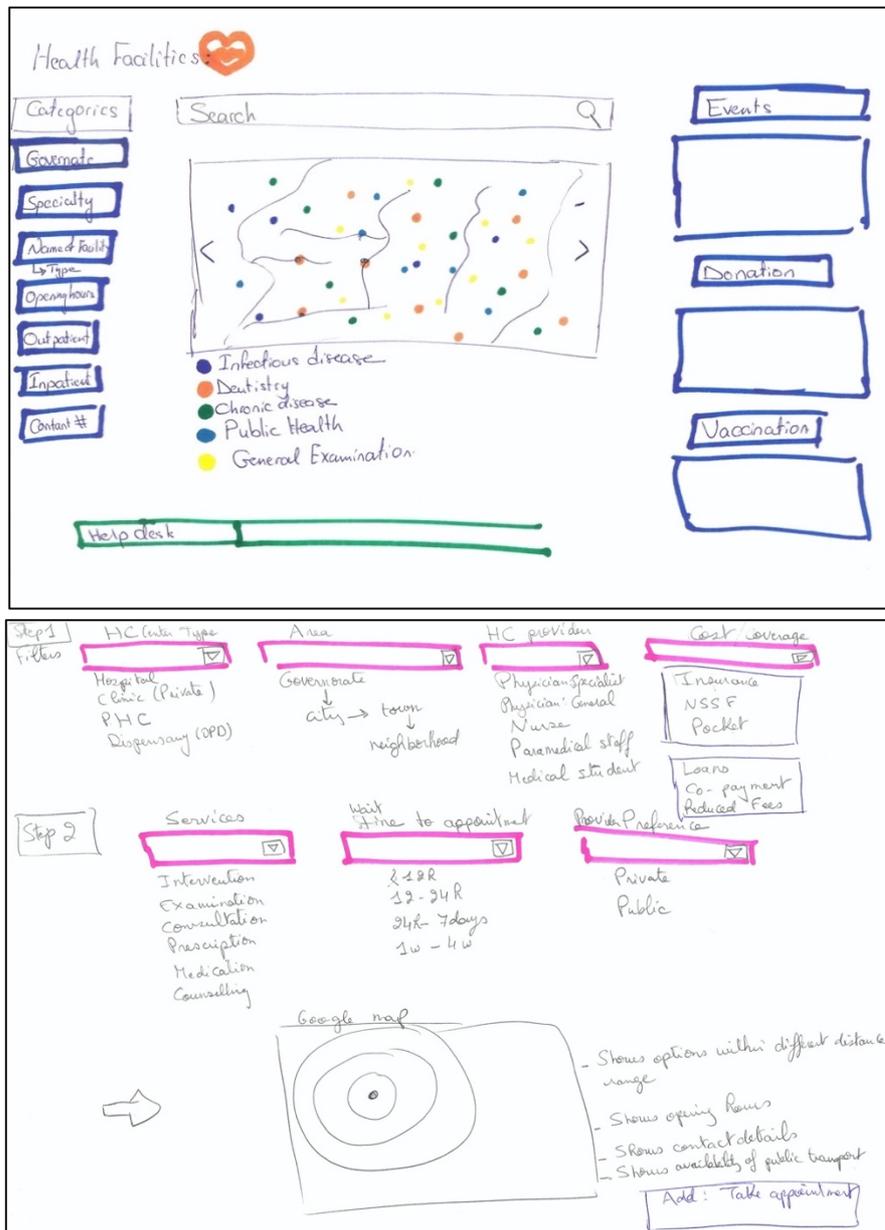


Figure 6.9 Sample Paper Prototypes of Mapping System

Phase 4 of the work with 4 all Causes took place after the uprising that was triggered on October 17, 2019¹⁰ and during the time the coronavirus pandemic was starting to globally unfold. Phases 3 and 4 were intertwined at this point since events and circumstances on the ground dictated reshaping tools in use.

Phase 4: Deliver

As the Lebanese revolution of October 2019 was unfolding, it magnified the shortcomings of the welfare and health sectors of the country. The socio-economic crisis was now salient on

¹⁰ Amnesty International (2020) Lebanon Protests Explained. Retrieved on 20 January, 2021 from <https://www.amnesty.org/en/latest/news/2019/11/lebanon-protests-explained/>

the ground as needs kept escalating with limited resources and with solicitation for the diaspora to intervene for support. Members of 4 all Causes subsequently realised that the mapping platform would need to change its scope. For this phase, I went back to Lebanon to discuss future directions for the organisation, including the creation of an online/offline system to respond to the latest developments in the country (especially as the mapping had become an even more significant priority). In this phase, several live and online meetings were held with key members of 4 all Causes to further tailor the platform Make Place Lebanon. The final tool consisted of the same mapping website (Figures 6.10 and 6.11) but it was tailored to encompass two pages: one for volunteers to 'pin' themselves and complete a survey to determine the services they are able to provide, and a page for NGOs/groups to pin themselves and complete a survey to determine the pressing needs of their surrounding communities. The tool became a matching platform between volunteers and requests of NGOs/groups and required an online/offline process to render it accessible and usable.

Upon realising that the mapping tool as an ad-hoc tool wouldn't be picked up by people; we co-created a process around it, acknowledging the heavy reliance on WhatsApp for coordination and mobilisation. Therefore, through WhatsApp and social media platforms (Facebook and Instagram), the map was disseminated and any information collected was either used to create WhatsApp groups for people in the same regions to coordinate interventions or to link people one-on-one based on the input on the map. The map could be completed in both English and Arabic and was mobile-friendly. In order to encourage people to use the map and render it easy to use, a demo video was created. The map was also circulated among different social media influencers, groups, mainstream NGOs and civil society circles that formed since the uprising and as a response to Covid-19.

4 all causes 4 All Causes/Volunteers NGOs Needs Map

Volunteer Profile

What is your name?

How old are you?

What is your current Educational/ Employment status?
Please select _____

What is your area of expertise/speciality?
Please select _____

If medical specialist or other speciality, please specify

If medical doctor, please insert your syndicate registration number

What skills do you have?

Figure 6.10 Volunteer Profile

4 all causes 4 All Causes/Volunteers NGOs Needs Map

NGO/Group Profile

What is the name of the NGO/Group?

Name of contact person/ focal point

Please provide an email or phone number which we can contact you through

Please specify which of the below is the first most crucial need for the population you are serving
Please select _____

Please specify which of the below is the second most crucial need for the population you are serving
Please select _____

Please specify other needs not mentioned in the options

When are these services needed?

Figure 6.11 NGO/Group Profile

Phase 5: Collective reflection

In this final phase, I held a discussion session in October 2020 through Zoom (due to COVID-19), with board members and key members of 4 all Causes to collectively evaluate and reflect on our journey together. The evaluation was related to the overall process that started two

and a half years previously, highlighting its main outcomes, strengths, weaknesses, and lessons learned. It also revolved around the members' perceptions and reflections regarding the methods used, my role as a researcher, and their envisioned next steps forward.

6.2.3 Analysis

Different types of data were compiled for analysis. I kept fieldnotes of the observations I was conducting along with minutes of meetings that were held with board members. In addition, discussions that were conducted during the workshops were recorded on a smartphone reserved for research activities and later transferred to my personal laptop. The conversations were transcribed verbatim in English by me, and with the assistance of a freelance transcriptionist. While reading through for analysis, I was listening to the recordings to ensure that no meaning was lost in translation. The materials that resulted from the sessions were compiled to support the analysis and I took photos of any material that was kept with the group members. Inductive thematic data analysis (Braun and Clarke, 2012) took place sequentially after each one of the five phases of engagements. The transcripts were manually coded, and the resulting codes were grouped into themes which were later relayed to the board members of 4 all Causes. Each step of the analytical process reflected findings which helped us to plan for the next phase. At the end of all phases I conducted a holistic thematic analysis to consolidate the findings. In reporting the findings, I assigned pseudonyms to the members to preserve their identity.

6.2.4 Findings

In this section, I talk about two main themes of findings that were generated from the data and the discussions with members of 4 all Causes: the challenges that shifted the focus towards participatory processes to navigate the internal tensions of the group and the creation of a narrative for healthcare transformation. I also elaborate on their implications for design research and technology.

Tensions within social innovation

Through observation, 4 all Causes presented indicators of a participatory culture by engaging with volunteers about future activities related to the group and opening the space to raise issues of concern. Nonetheless, while undertaking the various design activities such as the journey map, stakeholders web, and persona, it was evident that the group was less

homogenous than it initially seemed and there were underlying disagreements about some key aspects of the group's operation. These disagreements led to negotiations within the group that required me to step in and take a more active role in coordinating the conversation on how a horizontal structure might look. As one of the members pointed out:

"[...] at the beginning I was afraid that you might get caught up in our internal power dynamics and conflict and won't be able to take control, but you actually succeeded in being the driver for this process, you pushed us towards this transformation and your presence has put pressure on us to achieve this change" (Jasmin).

Role, services, and partnerships

Several members contended that the current unstructured approach which mostly focusses on health days (i.e., providing free physical and psycho-social examinations to certain communities) is somewhat restrictive, preventing the group from expanding its scope. One of the members commented:

"We have limited resources in comparison to other groups and we are independent of any political or religious affiliation, we need to expand our work and put ourselves out there or we won't make it among other NGOs" (Bassel).

These tensions opened the space for negotiations and were the foreground for introducing Loomio as a collaborative medium which facilitated voting on different components such as the vision, mission, and key activities, leading to the development of a manifesto. Collectively, members worked on developing an internal horizontal structure for the group, defining roles, and putting together a rotation system to ensure equity among members.

In relation to discussions about the services that the group provided and whether and how the group should expand its scope, collaboration with big international NGOs was often a point of conflict among group members. Indeed, while the group had been connected to a well-established and resourceful institution (Lebanese Organisation), the societal and political uprisings of October 2019 in addition to divergent viewpoints in relation to emergency support after the August 2020 Beirut port blast¹¹ were divisive factors. For example, the October 2019 uprisings put such organisations in the position of having to take a stance – either to respond to people's needs during the uprisings or take a more neutral stance and abstain. The Lebanese Organisation (LO) chose not to engage in activities to protect their

¹¹ Thomas and Abi Nader (August, 2020). Doing the government's job': Beirut volunteers steer relief effort. Reuters. Retrieved on 23 February, 2021 from <https://www.reuters.com/article/us-lebanon-security-blast-volunteers-idUSKBN25M1TE>

internal agendas, which created tensions. Even though the port blast in August 2020 brought such healthcare and relief organisations closer, due to the imminent need for help of any kind, the conflicting values of these organisations in terms of equitable access to services for all hindered such collaborations. As such, organisations such as 4 all Causes, while already having limited access to financial resources, were also restricted by not being able to collaborate and form coalitions with key organisations that had different value systems and agendas.

Hierarchies and volunteers

Group members discussed the importance of adopting a structure that was not hierarchical. Yet, one of the members perceived a horizontal structure as not being realistic as he thought it did not cater for accountability and did not entail proper structuring:

“At the end of the day you need one person that is accountable for what is happening. If we are saying that we want to grow, at least this is what I want, then we don’t want to keep on doing what we are doing now. We can’t grow up with this where everyone does everything” (Hadi).

Other members prioritised the development of a horizontal organisational structure, even though it could have gone against its impact and reach – i.e., a preference in developing a new participatory model for healthcare service provision as opposed to expanding operations to reach more people. The activity that required members to work together to construct personals also surfaced disagreements on the volunteers’ profile that the group needed to target. Such disagreements were based on the required expertise of the volunteers, with some group members suggesting that volunteers with public health/medical backgrounds should be a priority, while others argued for including everyone that might want to contribute – even if this created tasks overheads in relation to coordination and management.

Technology for internal organisation

The introduction of Loomio as a tool to support the group collaboratively putting together their manifesto, also started a conversation about how such technologies can contribute to the group more generally. Members felt that while such tools might be useful when someone was there to support them (in this case me as a researcher), their sustainability is questionable in relation to onboarding volunteers, training them on how to use the tools, and sustaining its technical infrastructure. This was evidenced and pinpointed by the group by the already low participation of the group’s volunteers with more mature and familiar tools such as WhatsApp and Google Docs. One member voiced out:

“I personally don’t think we can use more sophisticated tools because volunteers are already not responsive enough, like we send WhatsApp messages with simple Google surveys for them to fill and it takes them forever and multiple reminders to get back to us” (Lara).

Disagreements in relation to technology use surfaced in the form of divergent opinions on how to approach volunteers who were not active. For example, some members argued for filtering out inactive users, while others understood the problem as one of the technological tools that have to be adapted to fit volunteers’ needs. One of the members asked rhetorically:

“[...] you know 'til now I am wondering why we weren’t able to evolve digitally or get volunteers to be more active digitally, like was the drive lacking, compounded with the features of the tools themselves?” (Jasmin).

Such conversations about the role of technology in coordinating volunteering work and facilitating internal operations were complicated and expanded in multiple sessions of discussions with the group. This was mainly due to the limited capacity of the organisation in terms of the members’ and volunteers’ technological expertise. It took several meetings to select (Make Place) as an appropriate tool to support the group’s operation. Such protracted and iterative discussions around the possibilities of technology use raised interesting discussions in relation to whether this was time well-spent when instead the group could have focussed on helping people on the ground:

“[...] we are literally wasting time that should be given to people to get them the services, so in these 2 months we spent 3 meetings talking about a structure and we couldn’t reach consensus and we always came up with more reasons why we would not reach consensus. In 3 session we would have covered 150 new people” (Marta).

Such comments point to how such organisations often neglect, due to time constraints and a sense emergency, to reflect on internal organisational processes and the means through which a more effective organisation can be achieved. However, such data points to technology that is more naturally fitting within such a dynamic and potentially volatile contexts.

Transforming healthcare in a context of uncertainty

Members of 4 all Causes also pointed to the ways their activities are attempts to transform how healthcare is practiced and understood in the country, from a privilege for few to a right for everyone. To begin with, the group attempts to change the vernacular around access to healthcare services – e.g., referring to people that need access to such services as “right-holders” instead of beneficiaries. As discussed in one of our meetings, using the term right-

holder is a political statement as it affirms that access to health services is a right and not a privilege as understood by the current system's clientelist approach.

In addition to such attempts to transform how access to healthcare is understood, the group also engages in facilitating access to already existing facilities and medical services. Community-based organisations providing healthcare services exist in some areas, with the majority of the people not knowing where these services are provided and how they can access them:

"We want to eliminate the existing discrepancies in the quality of care and provide people with a more dignified service, even if the people in question have restricted financial resources, particularly in underprivileged areas of Lebanon where people don't even know what services are available" (Dalia).

Responding to this issue, one of the key activities of the group was to recruit local volunteers who act as liaisons, referring people to a health facility in the vicinity or to volunteers with a medical background.

Technology for healthcare transformation

Workshops and design activities acted as ways for the organisation to reflect on such strategies for healthcare transformation (i.e., change of rhetoric and facilitating access to healthcare) and make them more evident. In turn, this helped to open up the discussion about the role of technology and digital innovation to support and expand such activities. Ideation sessions that involved members sketching how a tool to support such activities might look pointed to geographical maps with coloured pins and tags to indicate the availability of healthcare services. Such a map could potentially facilitate (or replace) the work of volunteers in pointing people to local available healthcare services:

"[...] it can be like Uber, like if you go to a region, it shows you the centers nearby with expected distance to reach or who is available in real time from the volunteers to respond to a need" (Marta).

The discussion evolved towards the information that might be made visible on such map (e.g., waiting hours, fees, booking appointments, vaccines, awareness content, etc.) and how it could potentially be updated and checked for accuracy.

Viability and ownership

Discussions around how researchers, or the group itself, could find the resources and build capacities to develop and maintain the envisioned tool, surfaced uncertainty in relation to

whether such a system should be led by organisations like 4 all Causes instead of the public health sector (e.g., the ministry of public health). This suggests that both the scale and responsibility for undertaking such an initiative might exceed the capacities of the group, and an understanding that such mapping and coordination activities should have been led by the ministry. Beyond discussions about whose responsibility it is to develop such platforms, group members recognised that building a map-based website and populating it with pre-existing data (compiled by other organisations and openly available) seemed to be a task beyond the organisation's ability. Members indicated a preference towards hiring a local developer for developing such a platform, which was not possible due to a lack of resources. As a result, we collectively decided that a way forward could be via the use of an already existing crowd-mapping tool (Make Place), adapted for mapping local healthcare services.

Nonetheless, members of the group expressed their concerns in relation to whether marginalised communities that lack digital literacy or access to technology could use the map-based system: *"So how well would they be equipped to go in and search anyway. Maybe they will not have the skills to read and search. But it all depends on what you are suggesting"* (Rania). As a result, the system was configured to be used by local community-based organisations and liaising volunteers as proxies to such marginalised communities (instead of expecting people to directly access the information). Other options explored were the use of more widely available technologies such as WhatsApp to access the map's information.

Emergency Response

The level of uncertainty in Lebanon rendered it important for 4 all Causes to be responsive to various types of emergencies – for example after finishing the configuration of the map-based system for the group, COVID-19 was taking its toll in the country, so the system was circulated through social media and communication platforms (i.e. WhatsApp) with a message explaining the objective along with the demo video. From such initial dissemination, 50 entries were recorded on the map, yet it required extensive follow-up and wide dissemination to attract people and volunteers to make use of the system and information that it provides. Entries mainly included local NGOs, community-based organisations operating in the area, group pages, and volunteers with their availabilities. The matchmaking between people, groups, and volunteers was facilitated by the map as it made visible the locality in which each organisation or volunteer operated, but was actually organised through WhatsApp and

personal offline networking. Even though there were concerns from my side that the map was relatively underpopulated, the group was reassuring. They highlighted how despite the map not being used at the moment in its full potential it was helping by raising visibility about the group (4 all Causes), their values, and a call for healthcare transformation: “[...] *the map actually gave us more visibility, like even if people didn’t pin themselves, they used the map to contact us and ask for a service or for us to pin the need*” (Rania).

The Beirut port blast which happened while the COVID-19 pandemic was still ongoing, further accentuated the social, economic, and health disparities in the country. The absence of an institutional governmental response was salient and was extremely delayed. As such, we had to be reactive to a new level of uncertainty and the digital map was re-purposed and appropriated to identify volunteers for relief support. The map became a medium for conversation and for planning of coordinated efforts. One of the members of the group was responsible for overseeing the added content on the map and made connections between volunteers and people in need. Having access to such a digital map that concentrated needs and available resources and volunteers (configured before the COVID-19 pandemic and the port explosion) allowed ‘4 all Causes’ to quickly respond to such emergencies. This is evidenced by other groups launching their own mapping platforms later in the year, which created a productive (in relation to access to a plethora of map-based information) but rather antagonistic environment.

Within the plethora of grassroots initiatives and international agencies that acted in the following months, 4 all Causes has been successful in balancing the use of the digital map with the use of other ICTs (WhatsApp, Facebook and Instagram) to map needs and resources while also getting the information out to people that need it. This symbiotic process between the map, WhatsApp and other social media platforms was recognised by the members as positioning 4 all Causes as a key actor in the emergency response. One of the members commented:

“[...] through the approach we adopted and by increasing our online visibility we were able to attract a lot of volunteers and we made sure to maintain our model which stems from people’s needs and it opened for us the space for solid partnerships on future projects that will further propagate the narrative that we are bringing forward” (Marta).

Moving forward, I was interested to examine another area which was of utmost importance in service delivery in Lebanon and with implications on public health more generally, and that was food security. I was particularly interested in a youth-led organisation (identified in the scoping) Gift of Food (GoF) which also portrayed itself as having a bottom-up approach as a social innovation within the context of Lebanon.

6.3 Journey with Gift of Food (GoF)

Several organisations and groups particularly target food assistance and security, mainly because those who usually benefit or need to access services of the welfare agencies belong to low-income categories. Among those organisations is Gift of Food (GoF), a community-based and volunteer hunger relief organisation located in Beirut aiming to fight hunger and considerably reduce food waste in Lebanon. By working with several partners and organisations, including the private sector, GoF collects food surplus, repackages it, and distributes it to underprivileged communities (GoF website, anonymised for the sake of this research). It also distributes wholesome food boxes to various vulnerable households and runs soup kitchens, thereby creating a safe space to tackle loneliness by providing underprivileged people a space to convene and bond over food. In light of the different predicaments that Lebanon has undergone, GoF is among the primary relief responders by preparing, packaging, and distributing food parcels across various regions Lebanon (GoF website, anonymised for the sake of this research).

6.3.1 Methods

Working with grassroots/self-organised youth groups was primarily to explore the space for a more participatory culture and practices. The assumption is that these structures are more conducive for horizontal processes and engagements that are rather bottom-up. Therefore, the plan was to adopt a similar methodological approach with GoF as that of 4 all Causes while factoring in the divergences between both groups. With that in the background, the initial step was to build rapport with the founder of the organisation to have a better understanding of its identity and processes. At a later stage, one open discussion session was conducted with a group of volunteers, including a SWOT analysis to ascertain a collective view of the status and scope of the organisation.

6.3.2 Process

During the open discussion session with the volunteers, several members seemed inclined to have further discussions around the issues they raised, yet there was no possibility to conduct any additional sessions. Instead, the founder preferred to conduct meetings with me and one other member of the organisation's team to exchange ideas and discuss ways how, as a researcher, I could support the group. As a result, the next phase involved a series of meetings, during which several ideas were tackled. From a participatory design standpoint, I realised that one way to work with this group would be to build collaborations with other entities which might share the same value-system and focus on food security. I was able to initiate contact between them and another NGO that owned a food truck that was not being used. The truck could be rented, and the money would go back to a community kitchen run by the NGO to support and enable underprivileged women. This arrangement did not materialise as the founder wanted to study the idea further. Another idea discussed was the instalment of community fridges as a way to deal with food waste and grant access to food beyond the soup kitchen. This project intended to expand the reach of the NGO to various neighbourhoods and potentially various regions of Lebanon. In order to render this process more structured, we discussed the idea of creating both online and offline mediums. The online medium was going to include a map which visualised the location of the fridges, coupled by a WhatsApp network which connected people responsible for the fridges in each community and people who might want to collect the food. This online process was to be supported by offline engagements with members of the local communities to raise awareness about food waste and the roles of such fridges. The aim was to inspire other regions beyond Beirut to replicate the idea and scale it up. However, to better understand how all of this would unfold and to advance a more participatory approach, I suggested that workshops need to be conducted with volunteers to understand the food trajectory and get their insights on how the system would operate. This never happened and instead, the project was delayed for several months until the onset of uprisings in October 2019, which caused further delays in implementation and eventually pushed me to end the collaboration with the group.

6.3.3 Analysis

Similar to the work with 4 all Causes, I conducted a preliminary inductive thematic analysis based on the interactions I had with the founder and members of GoF. Due to the discontinuation of the collaboration and the encountered hindrances, the findings were quite

limited in comparison to the engagement with 4 all Causes. The analysis was rather shifted towards reflecting about the internalities of GoF and particularly discussing the shortcomings of this experience from the stance of participatory design.

6.3.4 Findings

Tensions within a perceived space of social innovation

The SWOT analysis discussion with volunteers revealed that the strengths of GoF were in its ability to attract volunteers due to the non-committal type of work and to promote a sense of community, belonging, and inclusion through its soup kitchen. Nevertheless, several tension points were conveyed, mostly linked to the uncertainty related to volunteers, funding, location, and logistics. The members expressed that while the NGO served a great purpose, they were facing several challenges at an organisational level. There was a sense of dependency on donors and donations making it critical for the planning and execution of projects as voiced by a member:

“We always see that we are not helping enough because we depend on free stuff; we always wait for the donations. Last time we had to buy stuff because we didn’t have enough time to get food donations and we don’t always have the budget for it” (Nariman).

Being a volunteer-based entity made it harder to have a solid operational structure and model, jeopardising as such the projects and their sustainability. These infrastructural weaknesses posed a threat to the existence of the NGO which at the time of writing lacked clarity in its decision-making processes. Some of the volunteers expressed some frustration regarding the operability of the organisation by highlighting things that bothered them:

“The soup kitchen is often disorganised, we buy supplies and then they disappear” (Marcel); “[...] sometimes we have 15 volunteers and other times 50, which makes it hard to organise” (Salam); “We have another manager who usually yells at us, and this is annoying” (Nariman).

The founder was quite adamant that the approach of the organisation was participatory, yet when prompted about decision-making processes, some of her statements, and later actions, as mentioned in the process sections (*“If I need volunteers I write to them to join an event... usually volunteers give ideas for fundraising events, in case I need help, I will ask”*, Milena) reflected otherwise. She was keen that the way forward had to be an app which would be used for multiple purposes: to volunteer, to donate food and money, and to advocate. While this might have been a way forward, there weren’t any indications from her side that

members or relevant stakeholders needed to be engaged in discussions to confirm whether the app would actually be of benefit.

In addition, from the meetings it was posited that a food coalition was established with different groups working around food in Lebanon. Yet, the founder of the NGO did not seem to see any value for it and thought that it was not going to lead to any impact since it had to be more of a collaboration rather than a coalition. She had expressed strong opinions about other NGOs in the field, questioning their performance and agenda. She stated:

“I do not see our organisation working with [anonymous] although we are in the same coalition, and we spoke about working together; their NGO lacks clarity about their agenda and I feel they are just there to show off publicly rather than do impactful work” (Milena).

The discontinuation of the collaboration with this organisation was the biggest tension point especially that the founder’s response when notified about this decision was that she was not seeing an intersection of the research and their NGO’s work. Months later due to the COVID-19 pandemic and later on the Beirut blast, the organisation was mostly focussed on delivering relief through donor-driven food parcels without a sustainable and scalable model for service delivery on the long-term.

6.4 Discussion

In this section, I discuss the implications of my research with both organisations for designing within contexts of friction and for designing for and with spaces of social innovation. Additionally, I ground these findings in technology design by discussing the implications of this work for ‘un-platformed’ and relational technologies.

6.4.1 Designing for contexts of friction

Positioning the findings in the work of Korn and Volda (2015), I contend that 4 all Causes engages in situated participation, while also being continuously in friction both internally, as a result of its self-organised configuration, and externally, with the state and other NGOs due to different set of values and organisational practices. This work contributes empirical insights stipulating that the act of developing an operational model that fights inequality and builds bridges in a country ravaged by socio-economic inequalities and severe fragmentation is by itself a declaration of a political stance. Similarly, GoF represents a state of friction vis à vis other actors within the same field and even with me as a researcher. The organisation as

presented by its founder is meant to be unique in promoting a bottom-up and inclusive approach around food security and the provision of food services to disenfranchised communities in contrast to the traditional tokenistic approach of other organisations.

Building on existing design for friction work (Hirsch 2011; Hirsch 2009), in the case of 4 all Causes, I posit that infrastructuring as a design method is a way to capitalise on contestational practices of youth-led groups, in order to infrastructure a model of service provision, overriding existing shortcomings and inequities. Infrastructuring in this case has two folds: first internally as we were able to create a design process resulting in internal organisational infrastructuring. The second fold of infrastructuring was working through participatory design (PD) methods towards infrastructuring as a long-term, open-ended, and multi-stakeholder process (Björgvinsson, Ehn and Hillgren, 2012a.; Björgvinsson, Ehn, and Hillgren, 2010) which capitalises on such occurrences of social innovation and pushes for radical change. In the case of GoF, the resistance from a key decision-maker within the organisation did not allow for such infrastructuring to take place and to advance a democratised and participatory model for food service delivery which the community fridge project intended to fulfill. In light of subsequent events and with the absence of such infrastructuring, the organisation had to resort back to traditional models of service delivery through distribution of food parcels through donations.

The case of 4 all Causes demonstrates some hope for pushing for democratic organisational structures which is considered the first essential step to move forward with a sustainable and scalable participatory design (PD) agenda. We cannot engage in a PD process in that context especially as it is fitted within a PAR research agenda without examining the existing embedded infrastructures within an organisation or group. The absence of any democratic practices from within would hinder any attempt to engage in participatory processes. The latter was evident in the experience with GoF as there was not even a possibility to engage in a participatory process since the organisation itself did not really reflect inherent participatory practices. Consequently, this created a state of tension which led to the discontinuation of the collaboration after a considerable amount of time spent trying to reach a common ground.

In addition, the experience of working in such context underlines some of the difficulties of using traditional Scandinavian PD methods to contexts where 'participation', 'democracy' and

'collaboration' are not engrained within societies. Among these difficulties is creating solid connections between organisations of similar values and goals, and developing alliances between them, coupled with designing the necessary socio-technical infrastructures to exert pressure on power holders. Developing our own alliances as researchers within such contexts requires us to reflect on our role in the bigger picture – are we contributing towards the scaling (out and up) of such socially-just social innovations or replacing public services that were supposed to be delivered by the public sector (and as a result contributing to the further NGOisation of the country (Mansour, 2017))?

6.4.2 Designing for social innovation within small scale organisations

The materialisation of social innovation is reflected in two ways through the work with 4 all Causes: both internally as a result of the democratic structure of the organisation which is rare within this context, and externally through the development of a socio-technical system that brings together various local actors for the more equitable and sustainable delivery of health services. In order to reflect on how as (participatory) design researchers, we can put design capacity into action for such social innovation (Manzini, 2014), I position these findings in relation to Manzini's design mode map (Manzini, 2014; Manzini and Rizzo, 2011) and the different roles researchers can take in designing for social innovation. Participatory design can be a tool that brings together various design capacities and motivations (social and the technical) (Kittur et al., 2013) and has the ability to create bridges between experts and diffuse social resources (Manzini, 2015). I initiated the engagements with 4 all Causes by trying to make sense of the participatory culture and organisation of the group and its activities (i.e., sense-making in PD but also in Manzini's work) and slowly progressed towards contributing to resolving issues and being asked to contribute to infrastructural needs (i.e., problem-solving).

Manzini (2015) distinguished 'expert designers' and 'diffuse designers' as different design roles in the context of designing for social innovation. Likewise, to Vlachokyriakos et al.'s (2014) work, this research reveals several constraints in bringing together expert and non-experts towards the resolution of common issues and concerns. In addition to divergent political agendas of local 'experts,' the strained economic situation and the general culture around the design of technology, render it extremely challenging to engage local 'expert

designers' in this process. Building bridges between experts and diffuse designers, grassroots, or NGOs requires financial resources, time, and people that such groups do not have.

It is widely known that PAR involves negotiation between the members of the community and researchers engaging in such work (Johnson et al., 2016). In such spaces, I had to work towards a balance between what is considered useful and contextually relevant by the members and what my own interests and funding demand. The initial technology-centred interests on the ways technology can be designed to support social innovation were sidelined by the more immediate organisational needs of the group. Mainstream PD work in Western contexts is often geared towards enhancing efficiency and scale of services through digital technology, solely focusing on tech novelty and underlying motivations without necessarily promoting a more participatory and equitable service provision (Simonsen and Robertson, 2013).

The PAR approach with 4 all Causes aimed at avoiding the imposition of methods that might come in conflict with the culture and context of study. Nevertheless, with GoF, it felt as if there was a certain imposition which led to a certain tension and escalated to the discontinuation of the collaboration. Throughout the research, I had to change modes, starting from a facilitator of process, and evolving into a design expert in dialogical design where I triggered conversations, challenging people's positions and organisational structures. The attempts to steer conversations to a more research and technology-led inquiry by suggesting possible open-source tools and already available research prototypes revealed sustainability and identity-related needs among 4 all Causes. In contrast, the founder of GoF was keen on steering the conversation towards technology (i.e., the app) while it was clear that the organisation was suffering from organisational problems which warranted further exploration. These experiences resulted in reflections around power and control since members of 4 all Causes had to be aware of the dependencies that could be created through such a digital infrastructure. In the case of GoF, I had to acknowledge the limits of my intervention as a researcher in pushing forward an approach which was not perceived as suitable. I argue that in either scenario, a researcher should refrain from mimicking existing power structures and rather push members to reach possible solutions by themselves. These engagements reflect bottom-up and top-down elements, but these were unavoidable due to the contextual realities encountered. As Manzini (2014) contends, a design process aiming to stimulate and support social innovation can either be top-down, bottom-up, or a hybrid of both depending

on who is leading and promoting social change. In the case of 4 all Causes, we followed a hybrid process since as a researcher, I tried to drive the process into certain directions for supporting and structuring social innovation as members often requested my advice, but they also pushed for their own directions and were highly involved in the process which led to a successful outcome. In contrast with GoF, while from the lens of research, one can perceive it as bottom-up since as a collaborator they wanted to steer the process, but it was not participatory and inclusive of other members of the organisation which actually made it rather top-down. Hence, a hybrid process is deemed more successful in such endeavours since it grants equal power to all those involved.

6.4.3 Un-platformed and relational technologies

In a highly controversial and polarised context, it was essential to push a group such as 4 all Causes, which posits to present a model of service provision contrasting the normative top-down approach of NGOs in the country, to strongly position itself in that space. This was achieved by consolidating a strong democratic and participatory internal structure. Such a structure can potentially be scaled out through their services to communities and influence practices of similar groups. Hence, design processes should consider the occurring organisational transformation. In parallel, while there was not a tangible outcome from the engagements with GoF, there was a theoretical conceptualisation of a system which also aimed at building socio-technical practices by building a synergy between offline and online mediums. This entailed relying on platforms such as WhatsApp and social media and connecting them to a mapping website for community fridges while running offline activities. These activities were to include community visits and needs assessments to ensure people were aware of the system at hand and to facilitate implementation. Yet, the founder did not realise the importance of building an understanding of the perceptions and expectations of people who will be part of this project and will potentially use the system. She equally did not grasp why it was pivotal to capitalise on familiar digital tools rather than directly developing an application which did not necessarily respond to community needs. Such insights from both experiences, align with the idea of building socio-technical systems with a purpose (Karasti, 2014) that integrate features of the different tools used or re-purpose the already used digital tools to achieve desired goals.

I strongly believe that any research conducted with grassroots and small-scale organisations around digital technology for service delivery should not aim to create a technical elite (Gurnstein, 1999) but rather should cultivate a sense of ownership towards the emerging tools which need to be properly situated. In the case of 4 all Causes, as the process evolved, it was clear that familiar off-the shelf technologies had a higher and more realistic chance to be appropriated by the members. The mapping tool presented a simple and malleable solution which overcame multiple institutional, technological, and financial barriers and was useful in a case that was not envisioned by the group. The final digital system resonates with work on social media technologies as a resource for design for coordinated participation (Lambton-Howard et al., 2020). It implies the augmentation of such tools by adding an external component as an extension, such as the crowd-mapping platform in this case, and by establishing a coordinated participation through the definition of social practices around the resulting model. With the high penetration of such platforms into delicate political contexts such as Lebanon, comes an array of issues such as corruption and a lack of democracy and trust as to how the data could be used. There is a responsibility as researchers and designers to design social processes and or protocols/guidelines of how these technologies should be used to both enable communication among such groups while also maintaining their independence, privacy, and safety.

In summary, in line with the second research aim, this case study demonstrates the significant role of self-organised and small-scale organisations in presenting alternative modalities of service delivery that address existing inequalities, challenge the prevailing welfare system, and rely on principles of 'social justice', 'participation' and 'democracy,' Being embedded within communities means such organisations are more successful in capturing the actual needs of community members, and engaging in social innovation practices in order to respond to those needs. While the engagement with 4 all Causes was fruitful, it was not the case with Gift of Food (GoF) due to an array of reasons which prompted me as a researcher to revisit my own assumptions regarding such structures and my pre-conceived notions around participation. From the lens of PD, for organisations such as 4 all Causes, to further amplify their impact and scale their work in order to address more structural determinants of health, it required building a coalition with partners of similar values. However, despite attempts to create such a coalition, conflicting agendas and divergent values stood as a strong obstacle. From the lens of digital civics, this case study confirmed the necessity to rely on tools that are already

familiar as they can be used to augment any possible platform that may be needed. It was the combination of the Make Place Map with platforms such as WhatsApp, Facebook, and Instagram which made it more accessible and responsive to evolving circumstances. Despite the intended use of such a platform, it served as a medium to further propagate and structure the work of a small-scale organisation with limited resources such as 4 all Causes.

Overall, this case study addressed research aims three, four and five. For the research aim three, it provided insights around another significant pathway of civic engagement which is based on self-organisation and bottom-up approaches. In line with research aim four, it reflected implications around infrastructuring (as a design pathway) of social innovation while highlighting obstacles encountered. It also indicated how the service model developed had to be progressively configured in order to be responsive in times of crisis and to evolving circumstances which responded to research aim five which was formulated at a later stage. The next steps of this research endeavour were originally intended to further expand on the work conducted with 4 all Causes, moving forward with a partnership with LO to create a more advanced mapping platform. Additionally, other plans discussed included approaching the Ministry of Public Health in order to get access to primary health care centres, specifically in locations in which 4 all Causes operated for referrals based on the map and to provide any missing services from the centre. Furthermore, public spaces were to be identified in order to conduct public health days where people could receive free physical examinations by volunteers and get the suitable referrals. This implied creating a coalition with partners who focus on health services and shared a similar value system as 4 all Causes. However, the turn of events, triggered by the popular uprisings on 17 October 2019 which were coupled by a strenuous compounded crisis, the COVID-19 pandemic and the Beirut Port blast, has disrupted the intended plans and urged me to shift my research into investigating the social movement that was progressively evolving. This was particularly important as this social movement introduced a new ecosystem of civic engagement, services, relief, activism, and collective action which had a transnational dimension. Hence, I had to position myself as a researcher in this new ecosystem and document the practices of configurations that formed and relied heavily on social and technical infrastructures and their subsequent implications. This shift led to the formulation of research aim five which is focussed on exploring the socio-technical infrastructures that form in times of crisis and uncertainty.

CHAPTER 7. DESIGNING FOR SOCIAL INNOVATION AND SOLIDARITY WITHIN A SOCIAL MOVEMENT

“The revolution of souls severs ropes, and the revolution of minds removes mountains.”

Ahmad Shawqi (Egyptian poet, nicknamed: the prince of poets)

As mentioned at the end of the previous chapter, as a result of unprecedented events and a build-up of circumstances within Lebanon, a popular uprising sparked on October 17, 2019 and brought extensive new contextual realities. Therefore, I had to turn my research endeavours towards the new landscape that was forming both within the country and transnationally because it drastically impacted existing ecosystems of civic engagement, service delivery, and social innovation and introduced a new ecosystem which warranted further investigation. Therefore, in this chapter, I describe a case study which examined in depth the Lebanese social movement that progressively evolved with shifting circumstances. It was essential to document and to build an understanding of the socio-technical infrastructures that were forming particularly the major circumstances including the global COVID-19 pandemic and the Beirut Port blast which incurred further implications on these infrastructures.

7.1 Background

7.1.1 Social movements as a constellation of digitally mediated publics

Social movements are described as *“collective actions based on solidarity carrying a conflict and breaking the limit of a system in which action occurs”* (Melucci in Stevens and Malesh, 2010, p. 8). Some studies within that space examine in particular the embeddedness of actors within such social movements and the processes they have created in order to enact their agency (Stevens and Malesh, 2010). In line with that, social movements often lead to the creation of ‘publics’ by bringing together an array of stakeholders under a common agenda. Publics are configurations of people that self-organise and are driven by common values, causes and motivations to challenge the conditions that lead to the formation of such publics (Dewey, 1954). As a result of their fluidity and dynamic nature, publics lead to development of relationships - referred to as ‘attachments’ - among their members (Marres, 2007; Le Dantec and Di Salvo, 2013). Such attachments are characterised by a sense of dependency, and eagerness to invest in resources, which could potentially lead to tensions within a public

(Marres, 2007). From that standpoint, publics are naturally politicised and constitute a medium to enact civic engagement. Such publics are built on a mix of offline and digitally mediated interactions (DiSalvo et al., 2008; Olesen, 2005). Hence, social movements are founded on the formation of socio-technical infrastructures of collective action (Tufekci, 2017). As a result of their versatility and permeability digital platforms and noticeably social media platforms have highly influenced social movements and enabled them to gain transnational dimensions (Howard and Hussein, 2011). Publics and constellations within social movements rely on such platforms to activate, mobilise, and organise collective action (Boichak, 2017). WhatsApp for example, which is an asynchronous messaging app, has a very high embeddedness within the Global South. It is a fundamental tool for political organising (Valenzuela et al., 2019), circulation of news (Newman et al., 2018), and coordination of collective action and activism in several social movements in different countries. Other platforms such as Facebook and Twitter played significant roles in the unfolding of events within different social movements such as the case of Egypt, Turkey and Tunisia and were counteracted by measures from governments to block these platforms (Wulf et al., 2013; Tufekci, 2017). Although in certain instances such platforms play a role in aiding protests (Saeed et al., 2011), raising awareness (Tayebi, 2013), and creating channels of dialogue with the State (Pietrucci, 2011), they are equally scrutinised in contexts of uprisings. Certain scholars contend that social media platforms have a limited role in social movements or are instruments to support existing political activities rather than bringing forward new types of activism (Fuchs, 2012; Brym et al., 2014; Byun and Hollander, 2015; Sun and Yan, 2020). These platforms are accused of undermining protest movements. The policies adopted by social media companies may complicate collective action and can possibly position those companies as complicit with governments that are trying to suppress social movements (Youmans and York, 2012).

7.1.2 The Lebanese social movement of October 2019

The initial protests that started in the evening of 17 October 2019 were indirectly triggered by a deteriorating economy, shortage in foreign currency, depreciation of the Lebanese Pound, and lack of a governmental response to wildfires that erupted a month earlier. This was also accompanied by the breakdown of the Lebanese banking system, as commercial banks were withholding the savings of Lebanese citizens and restricting the withdrawal of cash. However, a more visible reason was governmental taxation policies, including a tax of 6 USD per month

on WhatsApp, a key messaging and communication service in the country (Amnesty International, 2020; Bou Khater and Majed, 2020). The protests evolved into an ongoing social movement with the country witnessing student protests against the increase in unemployment, corruption, the misuse of public finances, and the linkages between commercial banks and the political elite (Chaaban, 2019). People protested against the deterioration of public services and basic needs including the lack of electricity and garbage disposal, as well as the increasing financial inaccessibility to healthcare and education. In contrast to the 'You Stink Movement' of 2015, protests were successful in surpassing sectarian and partisan divides and were decentralised by taking place in different cities and towns of the country (Ibrahim, 2020). Protestors reclaimed public spaces including squares which used to be privatised public spaces and occupied major road intersections (Ibrahim, 2020). These spaces became a ground for constructive dialogue and debate in relation to the prevailing social, political, and economic systems (Rhayem, 2020). In addition, as the economic situation was worsening, community kitchens were set up to provide food for protestors in public squares and several grassroots groups were delivering food parcels to underprivileged households throughout the country to counteract any clientelist aid provided by mainstream political parties (National News, 2019). Medical doctors and nurses volunteered their time to provide free and/or subsidised consultations and treatment within and outside to people who could not afford or access the mainstream healthcare system (Ibrahim, 2020). A league of lawyers formed to protect the rights of protestors who were detained (Ibrahim, 2020).

The efforts of these grassroots initiatives were sustained (with fluctuations) throughout the compounded crises faced by the country in 2020, including the COVID-19 pandemic and the Beirut Port Blast that devastated the capital (BBC, 2020). Initiatives, groups, and organisations amplified their efforts after the blast specifically due to the blatant absence of a governmental intervention. Efforts were organised towards the cleaning and reconstruction of the city and the provision of accommodation, medication and food to those that were severely affected (Thomas and Abi Nader August, 2020). To date, some of these initiatives both nationally and transnationally remain active and identify themselves as opposition to the mainstream political parties.

The movement is unique in that it witnessed a strong political involvement of diaspora communities who for the first time organised and mobilised against the hegemony, systemic sectarianism, and corruption of the Lebanese government. The diaspora actively tried to

reclaim a more significant role in the country beyond its economic one which had created an unsustainable economic dependency. The diaspora’s mobilisation was distinguished because it was centred on coordinated action across countries through the creation of groups and events on multiple social media platforms (i.e. Facebook, Instagram, and Twitter).

7.2 Methods

In alignment with the overarching PAR methodology of this research, this case study aimed to investigate the emerging socio-technical infrastructures and constellations of civic engagement and service delivery within a social movement and particularly in times of crises. It equally served to unravel the possible structuring of social innovation during such times of uncertainty. Two stages of data collection took place with distinctive objectives in order to respond to these aims. In summary, Table 7.1 presents the different engagements that were conducted for this case study.

Type of Data Collection Method	Number of Engagements
Online observation of social media accounts	12 social media accounts for groups, alternative media outlets and political bloggers on Facebook and Instagram
Joining and observation of WhatsApp groups	4 groups
Attendance of online webinars, talks and discussions	15 events
Interviews with activists in Beirut	8 activists
Interviews with diaspora members	8 members
Design Workshop with Daleel Tadamon	12 participants

Table 7.2 Type of data collection and number of engagements

7.2.1 Research Process

- Stage 1: deconstructing the ecosystem of the social movement (from October 2019 till November 2020)

In this stage, I relied on immersive critical ethnography (Lewis and Russell, 2011) to unravel the underlying socio-technical infrastructures of the revolution. As a member of the Lebanese diaspora and as a result of my pre-existing connections with activists, I was invited to join various WhatsApp groups which included activists and members of grassroots. I conducted online observation on both Facebook and Instagram. It involved going through posts of active

local and diaspora groups which were part of the social movement to have a better understanding of the different activities they were running, such as: protests, informational sessions, relief work, and advocacy and lobbying. Additionally, I attended several webinars and information sessions focussed on social, economic, and political topics of relevance for activists and those involved in the social movement. Through my personal networks, I followed a purposive and convenience sampling by conducting in-person semi-structured interviews in Beirut with five key activists and three members of opposition parties. The interview guide (Appendix G) aimed to solicit insights from them around factors that led to the uprisings of October 2019, the role of WhatsApp, the pros and cons of digital technology in that space, the roles of emerging social initiatives in service delivery and encountered challenges, and the sustainability of the collective actions being witnessed both nationally and transnationally. In order to have a better understanding of the transnational nature of the social movement and the underlying socio-technical infrastructures of the Lebanese diasporic communities, eight online semi-structured interviews (60-90 minutes long) were conducted over Zoom with members of the Lebanese diaspora located in different countries. These members were identified through convenience sampling due to my own connection to multiple diasporic groups. Additionally, for this specific task of data collection, as it served to inform an academic paper which I co-authored with my colleague, Dr. Reem Talhouk, among the eight interviewees, she interviewed two individual members while I conducted interviews with the other five members who belonged to diasporic groups. The interview guide (Appendix H) that was developed aimed to surface insights around the connections between diaspora members and Lebanon, their engagement with the revolution and subsequent events, the use of technology in their activism and collective action, and the challenges they encountered. From the lens of positionality, it was my own socio-political alignment with these groups and individuals and my personal endorsement of the wider social movement which facilitated building a relationship of trust with these circles. Subsequently, this enabled me to have enriching and uncensored conversations.

Analysis

Interviews of this stage were audio-recorded, co-transcribed verbatim, and translated from colloquial Arabic to English (in certain instances) by a professional transcriptionist and me. Furthermore, I compiled notes from my observations with annotations of my own interpretations. I followed an inductive thematic analysis by familiarising myself with the data

I had collected, manually coding the transcripts and extrapolating key themes. Since the analysis was sequential, the insights from Stage 1 supported in informing the work with Daleel Tadamon.

- Stage 2: working with Daleel Tadamon (from December 2019 till December 2020)

Based on the ethnographic research conducted in stage 1, I wanted to engage in concrete action through a participatory approach with one of the grassroots organisations I identified: Daleel Tadamon (*Solidarity Directory*). The aim of Daleel Tadamon (<https://en.daleeltadamon.org>) in its inception phase was to map and identify existing solidarity structures including local cooperatives, social enterprises and grassroots organisations which engaged in service delivery, local production, and welfare across Lebanon. Later on, Daleel Tadamon's aim shifted and expanded beyond mapping purposes and it became an enabler of solidarity enterprises and cooperatives across Lebanon. The aim was to provide technical support and trainings and create opportunities for either existing enterprises, to improve their work and reach, or for the creation of new solidarity-based enterprises. Driven by values of social justice and equity and being aligned with the main rhetoric of the social movement, the ultimate purpose of the group is to build and promote an alternative that democratises economic and service model in Lebanon based on principles of solidarity. In order to support the group in achieving their goals, I joined them, and we collaboratively conducted a participatory design workshop, multiple meetings with key stakeholders and community partners, and organised talks related to topics of interest such as solidarity movements and the digitalisation of the revolution. The participatory design workshop brought together various grassroots organisations and initiatives and activists working on topics related to sustainable agriculture, politics and policies, employment, environment, alternative media, cooperatives and health. We engaged in an ecosystem mapping exercise¹² (Figure 7.1) in order to explore the context in which Daleel Tadamon was positioning itself, by highlighting the interplay between multi-layered infrastructures, stakeholders, institutions and services. Challenges identified through the process were to be used to inform future design of projects and tools. Upon completion of this activity, we moved into further discussions in order to refine the insights from stakeholders and collectively decided that moving forward, it would be more conducive to hold smaller partners' meetings.

¹² https://design-kit-production.s3-us-west-1.amazonaws.com/Design+Kit+Method+Worksheets/DesignKit_ecosystemmapping_worksheet.pdf

In addition, the team behind Daleel Tadamon found it more efficient to first build their website which encompassed all the initiatives they had mapped and then solicit feedback from partners, rather than involve those partners in the design of website from the beginning.

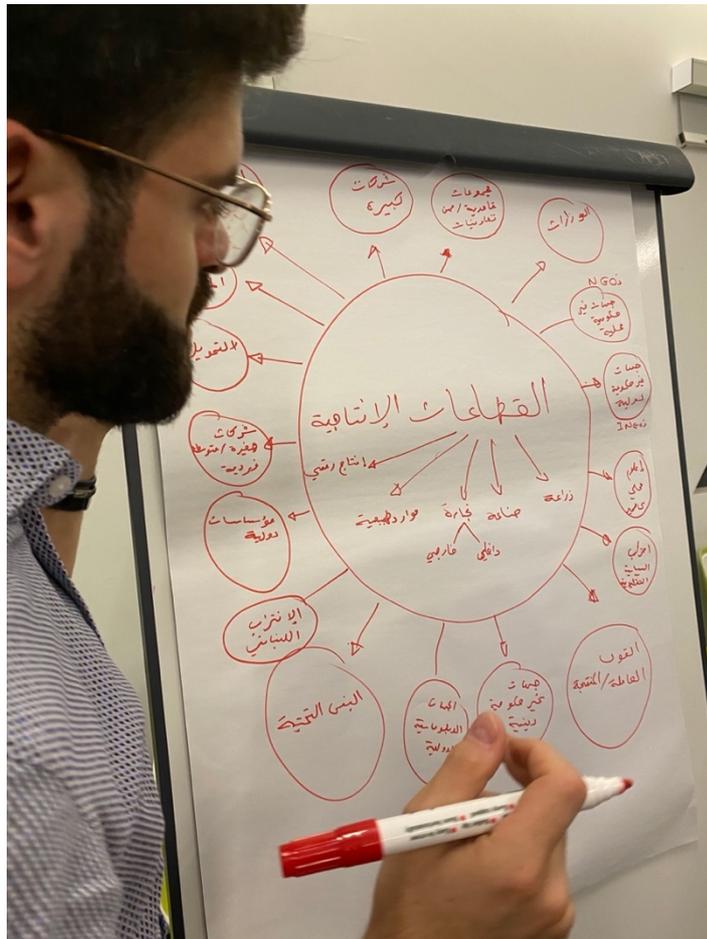


Figure 7.1 Sample Ecosystem Map (Arabic)

Analysis

Similar to the first stage, the analysis of this stage was an inductive thematic analysis but with limited data since the work with Daleel Tadamon was more practice-oriented than research-oriented and the engagements were more for organisational purposes. The workshop was audio-recorded, and discussions were transcribed and translated to English by me. Additionally, I took photos of the ecosystem maps that the different groups of stakeholders produced as supporting material for the analysis.

The final analysis after both stages were completed included an inductive thematic analysis. It included: 1) re-examining the information I collected from different sources, 2) revisiting the codes assigned to the transcripts where applicable, 3) arranging and categorising the data into higher level themes, and 4) reviewing the final themes used to organise the findings.

7.3 Findings

I present in this section the merged findings of both stages of analysis as findings were interconnected. The main themes that surfaced were: 1) the ecosystem of the social movement, 2) local and transnational uses of digital platforms, and 3) navigating the messiness of the local context.

7.3.1 The ecosystem of the social movement

From observation and immersion into the ongoing social movement, it was noticeable as events were unfolding that several key players were involved and relied on an array of digital tools (Figure 7.2). Through the findings, I surfaced the intricate technical infrastructures that local and transnational groups have crafted for collective action and the social practices they have built around these. I also dwelled on the intertwinement of local and transnational configurations and the most salient challenges encountered in that space.

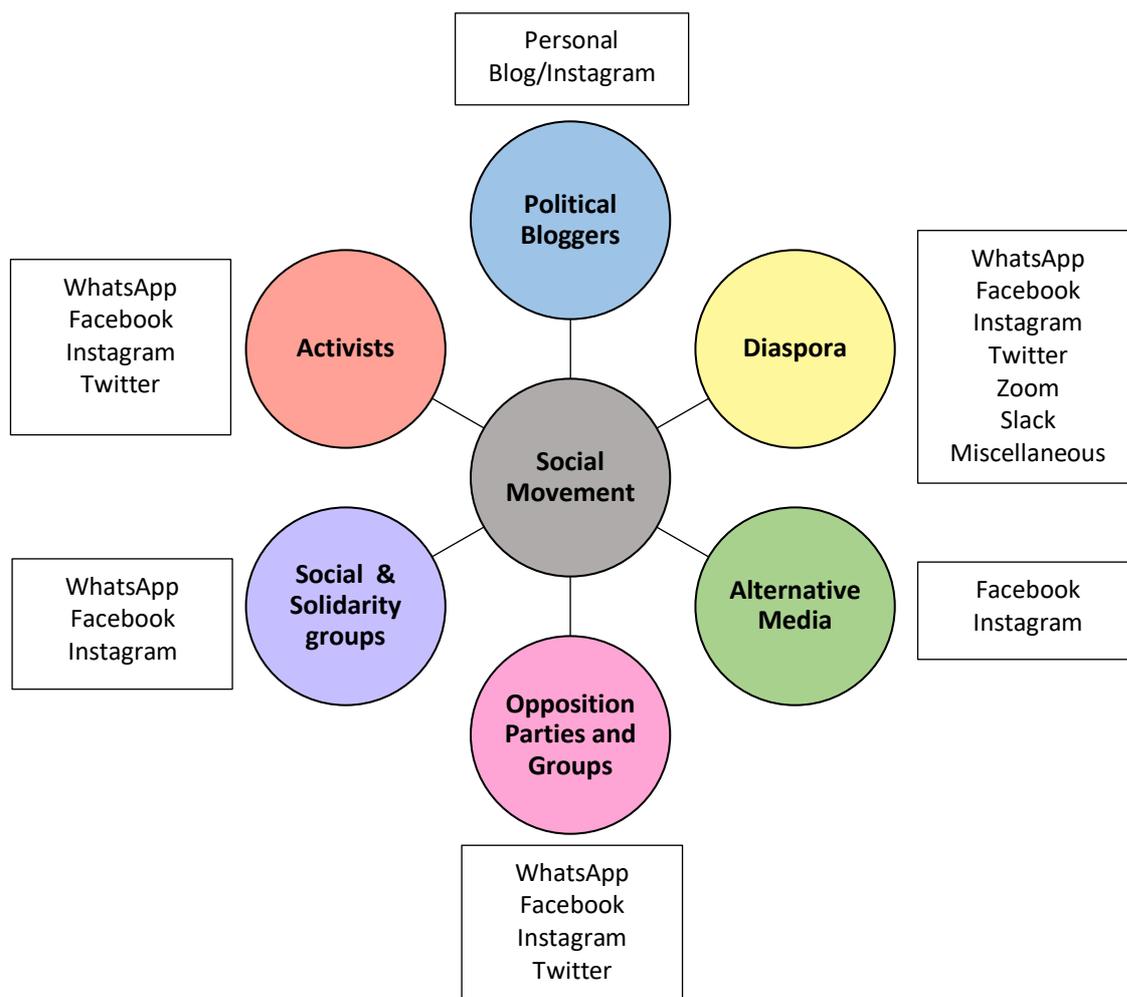


Figure 7.2 Ecosystem of the Social Movement: key actors and tools used

Local mobilisation and narrative

While initial news reports circulated that the main reason for the uprisings was the taxation on WhatsApp, the interviewed activists felt that this would be a reductionist justification. They confirmed that while it may have been the trigger, various root causes led to the popular uprisings which some referred to as 'revolution.' One of the interviewees elaborated:

"[...] the main reason was related to the current political regime which isn't being able to generate solutions for all the problems in Lebanon[...] Another direct reason is the economic situation; we can say that 2019 is the year of economic collapse [...] Also few months before 17 October there were many events which were worsening the overall situation like the fuel, electricity shutdown for more hours, dollar and bank s[...] so the economic crisis was starting to hit on people but they didn't reflect on it and weren't aware that we are in the middle of an economic collapse[...]The moment of realization and which can be the direct reason was the moment when the fires in Lebanon spread" (Amjad).

Prompted by WhatsApp's significance in pushing people to mobilise and revolt, interviewees explained that it had become an essential commodity for people because of its affordability in light of the expensive cost of telecommunications in the country. Some of the interviewees posited that for the first time, new groups of people, specifically those of deprived backgrounds, joined the protests. An activist conveyed that:

"[...] I agree that this was kind of a trigger for the people...as if you have a specific membrane and you're exerting on it a specific pressure so it will explode in the end [...] some people don't even have bank accounts, they have the WhatsApp service and in some cases they only use it on WIFI in some public spaces because they can't recharge and they cancelled the prepaid services; when things came to a point where the citizen should start paying for services that should be free of charge, it was obvious that the people who can't afford these basic services would revolt" (Majd).

Another interviewee expressed that WhatsApp was a common thread for people but that more significantly 'a collective anger' had built up over the years and the government's shortcomings were becoming more and more alarming in all sectors rendering it inevitable for people to react. This anger was cross-cutting across the country which rendered protests decentralised and gave the movement a whole new dimension because it was bringing people from all regions under a common umbrella.

"The feeling of anger that we were silenced about, but then we realized that we are many and we decided to speak up. Some people would prefer to pay 6\$ to buy bread. People who were that poor used WhatsApp as a means for entertainment. They got the most primitive phones that would allow them to install WhatsApp and communication without using the expensive telecommunications. I don't think people expected October 17 to be the start of a revolution, it was only a way of expressing their anger. But when they saw the collective anger and how

many they were, it led to a revolution because the anger was contagious. Thank God it happened; it is a blessing” (Rose).

For activists and members of opposition parties these protests escalated unexpectedly and morphed into a structured and coordinated social movement. While many conveyed that they had been working over the years, they were not ready for a movement of this magnitude. It required immediate mobilisation and coordination among various key actors and new entities that emerged organically. A member of one of the opposition political parties noted that there was a bigger responsibility on parties and activists who were known to ensure the movement was not being manipulated and driven by harmful motives:

“Most movements on the ground weren’t also prepared for it and those are the groups who felt the responsibility of sustaining this revolution, keeping it peaceful and working on making a change and we can’t say because we are technologically driven then this is what made us go down the streets[...] things shifted and the organized efforts in the beginning to block the roads were not from us as groups who are currently working on the ground but it became contagious later on and we took the lead” (Alexa).

Another key element which all interviewees agreed about was that the uprisings and subsequent events were mostly instigated and led by young people who have suffered the most as a result of unemployment and the increased cost of education. One of the activists voiced out: *“[...] it was based on the anger of the poor people so I think that the youth groups were organising themselves and the other groups were being responsive to their calls” (Amjad).* One interviewee indicated that the alternative political narrative which was brought forward was going to get stronger over time because in comparison to mainstream politics, opposing political entities were capable to mobilise young people, the future generations, at a larger scale, *“We are stronger youth wise which means that with time we will be even stronger because the future belongs to the youth” (Hicham).*

The social movement which transcended from protests activated various opposition parties. Interviewees who belonged to some of these parties posited that, in contrast to mainstream political parties, they were bringing forward an alternative narrative, driven by values of secularism and democracy, with some variance between parties. This narrative was mostly targeted at deconstructing the existing clientelist and sectarian system and rebuilding on foundations that guarantee equitable, transparent, and just access to welfare, service, and employment. Quotations by different interviewees highlight some of the alternative narratives that were brought forward by the social movement:

“The branding and ideology are re-generating; re-structuring; re-organizing; re-thinking...and it all came from the need that the society needs to be rebuilt on all levels (political and individual). Our aim is to have a secular and civil state with justice” (Alexa);

“We want to replace the 5 vices of the current system by 5 virtues, we have confessionalism [...] we want to transform this into citizenship. The second vice is corruption [...]to transform this into full on transparency. The third one is clientelism [...] replace this with a rule of law. The fourth one is that mainstream political parties are not masters of their own agenda because they are financed from abroad [...] we are financed by Lebanese funds. The fifth vice is that none of them are really democratic [...] we worked on becoming that by changing our structure” (Lamia).

Those who were active in opposition parties elaborated that their parties’ structures were focussed on being bottom-up, relying on decentralised efforts and participatory approaches: *“In opposition to mainstream parties whose decisions come from the top political leadership down, we actually collectively take decisions in a bottom-up manner” (Hicham).*

In alignment with the findings of the observation and news reports around different mobilisation efforts that took place, interviewees enunciated a number of multi-sectoral collective actions that were happening on the ground. These included creating soup kitchens, distributing food to protesters in public squares, providing legal support for detainees, and setting up multiple open dialogue and debate tents in public squares to raise awareness about the political and economic facets of the crisis and engage more people in the discussion. One of the interviewees who belonged to a group which was active in spreading awareness about an array of topics by hosting several key local actors and international experts and livestreaming through Facebook and Instagram, relayed that:

“[...] the idea came up that why don’t we - because most of us are on academia or at least work with academia on research and in education in general and are big supporters of continuing education even after graduation- the idea came that why don’t we bring someone specific that is knowledgeable in the different things that we are not understanding that is not happening during the revolution and have them have a talk. And anyone that is interested that is there, can anyone join us” (Yasma).

Additionally, in light of the deterioration of public services and the inability to access such services due to unaffordability and depletion of resources, existing NGOs were activated but several grassroots initiatives emerged as well and overshadowed those NGOs in their service delivery. Through observation, it was apparent that many coordinated efforts were channeled towards provision of medication, physical examination, psychosocial support, food security and recycling activities in public squares. Several of the interviewees described their own

engagements in such efforts which were sustained throughout the year to cope with the aftermath of COVID-19 and later on the Beirut Port explosion. There was a strong belief that these collective actions were seeding the way to challenge and change the system of the country by re-defining its welfare and service models. One of the interviewees stipulated:

“The groups which had a political dimension, and which were created during the revolution also had a social and an economic dimension and this enabled them to create initiatives with a solidarity and economical aspect. There are a lot of relief initiatives, and they are within the sphere of the revolution [...] I believe that we will be able to use the infrastructures of the relief to transform them into initiatives with sustainable, cooperative and collective social and economic dimensions and which would be the basis of an alternative economic system” (Amjad).

Diaspora’s mobilisation and rallying

The Lebanese diaspora was at the forefront in mobilisation to support the local uprisings and was engaged in action geared at mitigating the repercussions of the sustained socio-economic crisis. Various members acted at the individual level by contributing to fundraisers and the purchase of medical, food, and clothing assistance. One interviewee explained that: *“People would create Amazon shopping lists and had Amazon send items to their home, package them all up and then had different people fly them into Lebanon”* (Alice). This was coupled by attending online webinars and debates centred around the Lebanese social movement.

Other members of the diaspora decided to self-organise and create their own collectives and informal groups with few transitioning into structured entities. Some groups, such as Impact Lebanon, started as a meeting between people who did not previously know each other but wanted to be more actively engaged and significantly support efforts in Lebanon. Such groups eventually progressed into more formal entities. In Table 7.2, I summarised the information about the groups interviewed and highlighted their core activities in relation to the social movement. Multiple other groups were also formed in different countries with varying directions: some were targeting the creation of employment opportunities for Lebanese people, some constituted of smaller groups of individuals collectively supporting in relief and some were more engaged in spreading awareness about the general situation. Through observation it was noticed that a big lobbying role was played by members of the diaspora communities by using their dual citizenship advantage to turn attention to the situation in Lebanon and to exert political influence on the ground.

Group	Main activities
Impact Lebanon (UK)	Fundraising Awareness and activism Multi-sectoral activities: environment, politics, economy, employment, art, etc.
LEAN network (UAE)	Fundraising Social and economic relief Education
Tech collective (Ireland)	Fundraising Advocacy and activism Mobilisation of tech platforms
Lebanon Talks (France)	Conference with panels around sectors such as economy, politics, recovery
Lihaqqi (political party-Europe Branch)	Political activism Social relief Fundraising

Table 7.3 Diaspora groups and their activities

The interviews revealed that members who eventually formed such entities had a pre-existing civic engagement inclination by being socially active on a personal level and/or had their own previous volunteering experiences which were not always positive. An interviewee highlighted that while she was keen to be civically engaged whenever in Lebanon or abroad, she contended that *“You need an enabling environment; the structure isn’t supportive to maintain this civic engagement relationship with Lebanon”* (Melissa). Another interviewee described that while she used to remotely support some NGOs back home, albeit in a limited manner, the revolution was a turning point that prompted more civic engagement *“It was like a dream come true, we had goosebumps. People were one voice against corruption”* (Imane). Through observation, it was evident that the protests steered by these groups and collectives led to a ripple effect across several countries. Consequently, there was an emergence of a global network known as Meghterbin Mejtemiin (*United Diaspora*) positioning itself as the overarching umbrella for all protests and advocacy efforts that were taking place by diaspora communities.

An interviewee stated that it was important to emphasise the roles of the diaspora especially with the advantage that *“the diaspora is organised civically, economically, and ideologically”* (Rawane). Yet, from observation of the posts shared by different diaspora individuals and groups, while the social movement was a common thread bringing diaspora communities

together, it did not necessarily imply that all groups were aligned in their value system or political inclinations. Some were more politically engaged by using their own personal accounts to recount events happening on the ground, and endorsing opposing political parties, while others chose to focus on social and health relief with an attenuated political stance.

7.3.2 Local and transnational uses of digital platforms

Structuring and collective action of local configurations

Several interviewees described how social media platforms contributed to connecting them to the revolution, in turn encouraging them to become active within the revolution. They indicated that it incited them to plan activities in their own country of residence to support the revolution. One interviewee recounted *“We were watching the news through TV, social media (Facebook, Instagram) and through family and friends. We wanted to be part of this.”* (Imane) For some, it was important to cross-reference and compare and contrast multiple news’ sources to be able to have a better understanding of the situation. One interviewee recounted how at the individual level, she used her own Instagram to share news and spread awareness about the situation in Lebanon among her networks in the US by compiling information from sources she found to be trustworthy:

“Instagram stories being able to follow the people that you trust, who are in Lebanon and then watching their stories and then being able to from America, collect that information and tell the story. So, like, if you go to my Instagram. I have a highlight on Lebanon. It goes on from the Lebanese revolution explaining in the best way that I was able to collect from all of my different sources. What it is, why it is what's happening, how to help and then all the way through the blast” (Alice).

Technology was central to the social movement that was unfolding on the ground. Based on observation, it was noted that several ad-hoc WhatsApp groups were created with unknown admins inviting people. In parallel, several Facebook private groups were created under the name of the revolution which were moderated by admins. Opposition parties upscaled their online presence on social media platform such as Facebook, Instagram, and Twitter. According to the interviewees, since the movement was driven by young people, they were capitalising on digital tools to mobilise and structure their collective action. One interviewee alluded to that by stating:

“I feel it’s normal and native because the young age group that is being part of the protests are native to the technology and it’s their civic space and the replacement of the public space that we lack. So, they don’t participate in the political civic spaces so it’s normal that the digital space is a norm” (Mouhanad).

This quotation highlighted that in contexts where offline public spaces have selective and constrained access due to political hegemony and elitism, which excluded young people from decision-making and political dialogue, digital spaces became a medium for free speech and expression through which young people enacted their political agency.

The activists from opposition political parties conveyed that they either had to reform or re-structure their organisational practices in light of these shifting circumstances. One of them referred to having a customer relationship management (CRM) system within the party entailing different tools, strategies and databases to connect with members and community members. That party built a website which reflected their internal structure which was based on the snowflake model (Finuane, 2021). Such a model included different decentralised blocks working on different themes related to different sectors across regions and people could join by joining the corresponding WhatsApp group. Another activist described his party's reliance on WhatsApp for mobilisation, planning, and coordination of collective action based on different committees. They used Google sheets with access codes and engaged in private groups on Facebook as evidenced by his quotation:

"Many groups were organised on WhatsApp mainly and on FB groups. For example, we work on WhatsApp and we vote on Google docs and we use codes for each member; we also use FB groups and FB workplace for internal organization and we are using now FB private groups to organize those who are affected by the banks" (Amjad).

Political grassroots that were not necessarily formal parties would also use an assortment of tools for different purposes, as one of the activists explained: "[...] we use Slack for serious work, we mobilise through Facebook, Instagram and Twitter, Zoom for meetings and WhatsApp is for discussions about different events and news" (Hicham). That same activist conveyed how news that was circulating through different social media platforms was inciting people to lend their own professional expertise such as legal counsel to protestors and activists who got detained. Another interviewee echoed this by explaining how their NGO was particularly supportive in simplifying and conveying digital rights to protestors, shedding light on threats of social media platforms and explaining how to ensure privacy of their data especially if they were to be detained.

"During the revolution, we created a hotline for everything related to safety and security, hacking, any issue online and we tried to resolve such issues. We received around 200 cases

until now and we are also trying to work with the people who got released after detention. We are also trying to inform people on how they can protect themselves". (Mouhanad)

The movement was a fertile ground for the rise of alternative media platforms particularly led by young people who were reporting events on the ground and challenging mainstream media and political parties' claims. Existing alternative media outlets such as *Megaphone* strengthened their online presence while other platforms emerged such as *Fawra media* (translated to 'outburst media'), *Akhbar al Sahha* (translated to *the 'news of the square'*) among others. They were all positioning themselves on Facebook and Instagram as mediums for information, documentaries, and live updates from protests. In parallel, several bloggers also had a pivotal role and resorted to Instagram and Twitter to share their political views, fact-check news that was being circulated, and mobilise people, such as: Maher Abou Shackra (@mshackra), Political Pen (@politicalpen), PolyBlog (@polyblog.lb), Chloé Kattar (@leb.historian), Oleksandra El Zahran (@polleksandra), etc. Other accounts on Instagram served as resources and directories for events such as Daleel Thawra, Megaphone, The Lawyard, Legal Agenda, etc. Even local influencers with blogs around fashion and lifestyle used their Instagram accounts for mobilisation, fundraising, and promotion of relief initiatives. There was a constellation of social media platforms underlying the social movement as described by one of the interviewees:

"On the outreach level, WhatsApp is a very good tool to announce the events and movements; Instagram, Twitter and Facebook are also used for this, and many pages were created for this like "Akhbar al Sahha, "Daleel Thawra" ...and many more. Also, there was a major role for sarcasm pages which have many fans and followers in inviting for the protests like 'Mawtoura', 'Adeela', 'Lebanese memes', 'El3ama'...so we capitalised on their presence" (Amjad).

Grassroots groups and initiatives that surfaced created their own digital infrastructure by forming Facebook groups to organise their relief work and connecting those to taskforces operated through WhatsApp. Likewise, Daleel Tadamon positioned itself as a pioneer and key player focusing on solidarity as a pathway and promoting local cooperatives and solidarity enterprises as a model for community development. The website the team created served as a medium to crowdsource information about solidarity structures. It also served to encourage collective action through the support of existing cooperative structure and through the creation of such structures as a long-term plan beyond the social movement. One group member conveyed:

“[...] we are engaging through various social media platforms and using our website as a resource for people to know what cooperatives, social enterprise and local production initiatives are out there because we want to advance a new narrative on how services, economy and welfare need to be provided in the country” (Mazen).

Structuring and collective action of diasporic communities

Interviewees from the diaspora reported that at the onset of the social movement, during the initial protests, they felt personally concerned and were seeking avenues to be involved. As such, through personal initiative, some of them started inviting their own networks to mobilise in protests in their countries of residence. Protests were held in front of Lebanese embassies and other public spaces in London, New York, Montreal, Paris and other major cities with meeting points and times disseminated through social media platforms. Live streams and videos from the diaspora protests were shared through social media to show solidarity with those in Lebanon.

“There were protests all over the United States, all over the UK, all over all of these other countries where Lebanese people are. Brazil for example, where Lebanese people are collected...it is a way to actually stand or show up in masses while being virtual” (Alice).

Diaspora communities also organised town hall meetings for those interested to be more involved in coordinated action. From those meetings, collectives and groups emerged, positioning themselves in the narrative of Lebanon’s social movement. The groups that were formed had different internal structures and operational models that were mediated through technology. Some groups were keen on having a bottom-up approach. This was attributed to the idea that while demanding change at the political level in Lebanon and a new social contract built on better social values, it was equally important to reflect these values in the diaspora’s own practices as noted by one interviewee:

“We ask the members to suggest projects, gather people who are interested, and they execute. We are willing to provide the needed support but the person who suggests the project takes the leadership as long as the project fits the set of values we have. We didn’t want it to be top/down and force our priorities on others” (Melissa).

However, through ethnographic work it was observed that while some of these groups were true to their claims about having participatory approaches, others whether intentionally or unintentionally were imposing a hierarchical structure in their operational models. In some of the groups, the founders were the ones dictating the course of action or priorities to be tackled without necessarily referring back to the rest of the members.

For coordinated work and upon becoming formally structured with bigger responsibilities, groups had to incorporate tools such as Slack: “[...] *in terms of the digital tools, I think Slack is amazing because it is global, we used it to pitch in our last fundraising idea quite fast, we share documents and tag people*” (Melissa) and Zoom. Zoom in particular was popular in light of the COVID-19 pandemic as a result of its wide and global diffusion. Consequently, it was also quickly adopted by local groups in Lebanon which facilitated the communication with diaspora groups. These tools supported the infrastructuring of such groups because of their features and functions, facilitating organisational tasks such as arranging meetings, connecting multiple stakeholders remotely, and project management. While most interviewees highlighted their significant engagement through social media platforms and WhatsApp, one of the groups, Impact Lebanon, invested in a stronger digital presence. It created its own online platforms for specific projects related to environment, politics, employment, heritage, and e-commerce but linked these to Instagram pages to make it more accessible for the public. One of its members built a website (<https://www.lebaneserevolution2019.org> [currently inactive]) (Figure 7.3) which was not launched under the name of the group but served as a medium to compile material pertaining to the revolution and to archive events and artwork while creating a historical timeline for the social movement. In addition, the group was running frequent webinars over Zoom tackling an array of topics that were relevant to the different phases of the Lebanese social movement and related to future directions for the country.

Findings also reflected that the varying skill set among members of the diaspora was pivotal in the success and sustainability of the efforts led by these communities. As the situation was unfolding in Lebanon, people working at leading tech companies such as Facebook, Google and LinkedIn were mobilised and their tools were solicited for support. For example, Google maps were used extensively, especially post the Beirut blast, to showcase housing and shelter options for affected people and to highlight the impact on small businesses within the explosion radius. Facebook also had its community relief page activated for people to post their needs and the services they were willing to offer. Furthermore, crowd-funding platforms such as GoFundMe and JustGiving were heavily used by individuals who started their own personal campaigns or groups who launched thematic campaigns. The campaigns covered a plethora of issues such as provision of food and resources to activists on the ground, support

in medical equipment and food items in response to the economic crisis and COVID-19, and relief and construction post the blast.

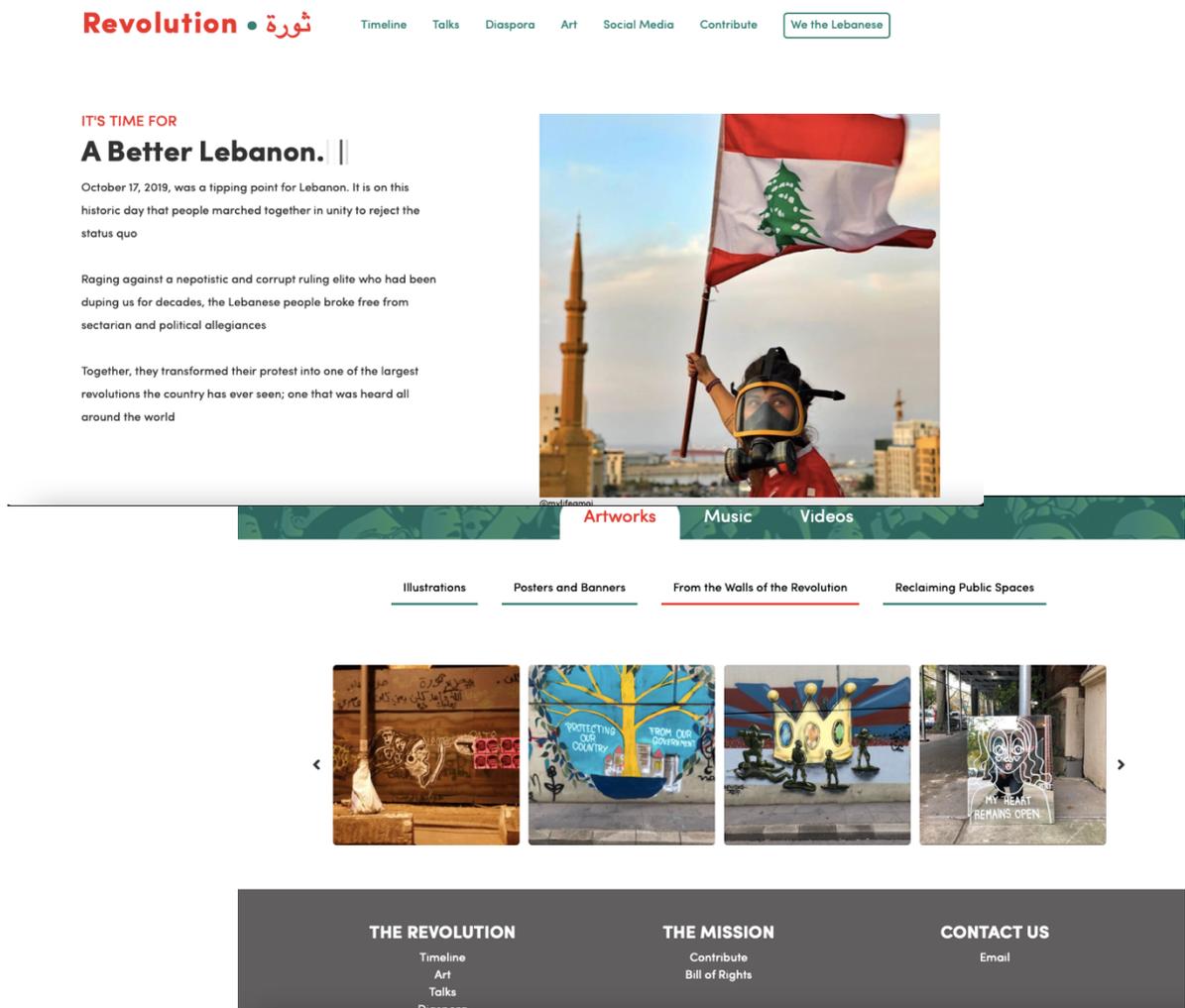


Figure 7.3 Screenshots of the website for the '2019 Revolution'

Interconnected collective action of local actors and the diaspora

There was a strong belief among interviewees that the diaspora had acquired a bigger role by becoming more actively engaged in various sectors such as: economy, environment, social welfare, construction, public health, and politics. In order to work with local actors on the ground, many of the diaspora groups formed WhatsApp groups to coordinate and plan activities. One interviewee explained that their whole operational model was facilitated by WhatsApp. "We rely on a WhatsApp model, different groups for food, medication, projects post blast, long term projects" (Imane). As a tool, it was deemed essential for having a viral effect in spreading the word, owing to its affordability, familiarity and the heavy reliance of people back in Lebanon on it as a core communication tool. As a result of the Covid-19

pandemic, the economic crisis was escalating and with it the livelihoods of people in Lebanon were jeopardised. In order to be responsive to the shift in circumstances, many of the groups and individuals were actively coordinating to ensure medical supplies and food items were being delivered to those in need and as such a COVID-19 response taskforce was created as a WhatsApp group. The group brought together different individuals and groups working on the response both in and outside of Lebanon. Such actions were part of an attempt to avoid duplication of efforts and to unify initiatives, which also included creating Google Sheets databases. The databases encompassed mapping active initiatives and community needs and were circulated between operational entities. In addition, Impact Lebanon had originally planned an event in London to support artists and designers in Lebanon. However, due to the COVID-19 pandemic, the event was cancelled. After extensive research and experimenting, the group managed to build an e-commerce platform linked to an Instagram account to sell products and artefacts and consequently it turned out to be an alternative and more sustainable way to contribute to the local economy of Lebanon.

7.3.3 Navigating the messiness of the local context

Challenges for local actors

From both observation, first-hand experience, and interviews with activists, a plethora of challenges were at the forefront for local groups. Activists referred to a lack of coordination among different entities on the ground and a lack of unified vision which meant their strategies were often fragmented. *“In brief, some try to take the credit of a certain issue that happened or calls out for a certain movement without coordinating with other groups just to get all the exposure”* as Majd, one of the activists highlighted. While digital platforms, including social media platforms, were pivotal in mobilisation, coordination, planning and implementation of collective action, they encompassed numerous challenges. According to activists these challenges were infrastructural since the weak connectivity in Lebanon and power cuts meant that people could find themselves unaware of events happening on the ground especially with mainstream media not always covering protests. WhatsApp as a core tool for the whole social movement, with its viral effect, entailed the circulation of rumours and fake news that potentially led to severe repercussions amounting to violence on the ground. One interviewee highlighted:

“The negative side is that there is a wide probability for rumours to spread because anyone can send a message on WhatsApp, and this might play against the cause because if many

similar fake news spread then people won't believe things when they might be actually true at some point and might disregard the news" (Majd).

Additionally, while several social relief initiatives were proliferating, the bigger challenge was to ensure sustainability of such initiatives especially considering that a lot of the funding comes from abroad and could be interrupted at any stage. Equally, since the bulk of funding was being transferred from abroad, activists noted that the deplorable banking situation made it very difficult to secure funds. Another point which was raised by one of the interviewees around sustainability related to the cost of technology, she referred to a case where livestreaming dialogue sessions was deemed too expensive for an informal group like theirs. Realising the power of social media in advancing the narrative of the revolution and the wider social movement, mainstream political parties were manipulating social media platforms by having their own social media armies counteracting the activists' narrative. One of the activists stated:

"When one hashtag trends, another opposing one trends against it in less than an hour. It was all pro or anti revolution. The other side that was not supportive of the revolution were very active and they were known that they were capable of making hashtags trend before the revolution. They had their own people and own mechanisms" (Rose).

Privacy of data and the unknown identity of members of WhatsApp groups were major issues for interviewed activists as they put people in jeopardy:

"I joined some WhatsApp groups where I only know few people, but I treat them with caution, but they are now a space to reflect; however here is the threatening part because you would be discussing something with someone you don't know and there is no chance to develop your opinion" (Alexa).

One interviewee mentioned that there were still communities who were not being engaged and were stuck in their own silos which implied that any political change was very challenging. These communities still resorted to political parties for welfare and other favours. Moreover, the flow of information also affected activists' mental health and often led to burn out as one of them flagged:

"The other bad thing was the tsunami of information where it was tiring for the mental health of people. You are bombarded with information and accusations. You start to feel committed to reply to every single idea to prove that you are committed to this revolution" (Rose).

Interviewees also discussed a constraint which was the overestimation of the potential of technology, as often a big engagement was noted on social media platforms but not

necessarily reflected on the ground. One interviewee explained that social media was not enough for change: *“I think that social media will stay a tool; you can’t end a regime on social media; people should go down to the streets like what happened in Egypt and Tunisia”* (Majd). There were clashing views among activists whether the aim was to create a parallel system for services or to reform the current one and force the government to assume its responsibilities. One of the activists posited:

“From a technical perspective I don’t believe in parallel and NGO structures because it was the reason that people stayed 30 years not voicing out their call for their rights. The sustainability of parallel structures would mean that you are disregarding the government’s dereliction” (Alexa).

The findings from the workshop with Daleel Tadamon echoed the complex and problematic ecosystem in which the group had to grow. From an ecological perspective, there were different layers to navigate such as the individual level, the community level, the national level, and the policy level and each came with a set of challenges. This was particularly due to the constellation of stakeholders involved and subsequent conflicting agendas, and legal and structural barriers. Dilemmas arose around whether the general strategy of groups such as Daleel Tadamon should be to work within the system or instead to strive to on dismantle it and re-build; this led to divisive opinions among the different stakeholders. The conflicting views discussed during the workshop eventually converged into depicting the ecosystem and the hindrances and determinants it encapsulated, but there was not a consensual agreement around pathways on how to operate within such an ecosystem.

Challenges for diasporic communities

Some of the interviewed diaspora groups highlighted that one of the main issues they encountered was their inability to have a legalised structure due to the system in Lebanon. One of the group members mentioned that the process of registering their group as an NGO in Lebanon was very tedious, so it remained an informal network connected to already established local NGOs. Moreover, it was noticeable through the conversations that interviewees did not report on challenges pertaining to the digital tools in their own countries of residence, however they reported on challenges when some tools were employed at a transnational level. Among those challenges was Lebanon’s struggle with connectivity but also the discrepancy in terms of digital literacy and infrastructure especially at the governmental level. One of the interviewees mentioned a long-term educational project aiming at digitalising learning through the use of tablets in classrooms to teach the Lebanese curriculum

while incorporating global citizenship modules to build a civic engagement spirit among pupils. Yet, as the target was supposed to be public schools, known to be severely underfunded in Lebanon, bureaucratic hurdles and a lack of resources from the ministry of education prevented that project from materialising. This demonstrated the significant fissure between publicly run institutions and private ones which often possessed a digital advantage.

Diaspora communities managed to mobilise and self-organise internally, but a big part of their engagement was related to coordinated efforts with key actors on the ground in Lebanon. As previously mentioned, various crowdfunding campaigns were set up by diaspora groups to support local organisations. Nonetheless, it was clear from interviewees that these activities required building trust with local actors by exploring introspectively how these organisations were functioning and their level of financial transparency and accountability. This was especially true since it was diaspora members that were to be held accountable for any donations made through the crowdfunding platforms, *“There is a duplication in the social work and diaspora are providing money in an unclear landscape and we do need to see localised impact”* (Rawane). Members who were part of established collectives expressed trust concerns regarding NGOs in Lebanon since many have political and/or sectarian affiliations which are often hard to detect. To rightfully channel funds, organised diaspora groups devised vetting processes to review local organisations and ensure their credibility. At the individual level, one of the interviewees posited that many organisations have managed to clearly disclose the relevant information which encouraged her to donate accordingly:

“And so I have seen on many different GoFundMe pages, but also on different like financial pages on NGO websites they sometimes have it like a description of how the money will be transferred [...] So I feel like I have been given that information that otherwise I would usually ask like [...] oh, I'm going to be sending dollars, but how is someone going to withdraw these dollars and Lebanon, what's going to happen to the money” (Jamila).

Beyond the financial aspect, diaspora members postulated that before supporting any of the local organisations, they had to ensure that they were aligned with the revolution's narrative, for some it was important that such organisations shared a similar value system. An interviewee explained that:

“I look at their website, if they have one. I look at their posts, I scroll through many, if not all of their posts, depending on how many there are. I look at the language choice. I look at how they frame themselves, how they market themselves. I look at their discourse very closely when I have questions and when I am in doubt.” (Jamila).

Interviewees reported that while being careful in supporting organisations during the uprisings, after the blast, they were more eager to support. This was validated by observation, as many diasporic engagements were dormant during the months prior to the blast and re-surfaced strongly after it. In addition, trust was not only an issue vis à vis local organisations, but also among diaspora communities and particularly the groups that were organising campaigns for support. One interviewee noted that she went to events conducted by one of the diaspora groups, but she started being sceptical about their true intentions as she noticed that they had more of a political inclination that she did not agree with rather than focussing on social and economic relief; as such she decided to stop engaging with that group.

Diaspora's agenda vs. the local agenda

Many of the interviewees contended that diaspora efforts started with a politicised direction by organising protests in parallel to the ones in Lebanon. Yet, a key aspect of collective action that was brought forward by the interviewees was the need to formulate and formalise a common agenda among members engaging in diaspora structures. According to some of the interviewees, this was not evident because people were coming from different disciplines with different working processes and needed to reach a certain level of consensus in a more or less democratic manner which was not always possible. On the other hand, one of the interviewees believed that the diaspora was responsible for re-shaping the existing political discourse in Lebanon because the diaspora carried with it: "*Western notions such as freedom of speech, democracy, secularism, civic duties and civil society*" (Alex). By attending online webinars and talks to observe the diaspora's positioning and activities, it was noted that the conversation was around re-configuring the existing systems in Lebanon and proposing interventions to improve current efforts on the ground. Nonetheless, a lot of these conversations were mostly academic and technical and did not capture some of the more contextual realities or the plurality of voices of actors in the field. Those somewhat siloed conversations resulted in having substantial negotiations with actors on the ground because there was a disconnect between both sides. The perceived obscurity around the local opposition's political agenda left diaspora members sceptical about the capabilities of the opposition parties in impactfully changing the political discourse in Lebanon especially with the entrenched sectarianism.

This discrepancy in both discourses was translated into a frustration by diaspora members towards the performance of local actors and particularly activists. One of the interviewees voiced out:

"[...] it is infuriating that till now activists and opposition parties aren't able to formulate a common agenda and work towards it, what are they still waiting for? what does it take to come together in one space and put the ego aside and reach a common ground?" (Melissa).

In parallel, some of the interviewed local activists relayed that there was a disconnect between the diaspora's approach and the local context. Clashes were inevitable in that space because often members of the diaspora do not have a well-rounded understanding of the power dynamics on the ground. One of the interviewees noted:

"[...] there is sometimes divergence with some of the diaspora groups, for example because accountability in Lebanon is hard and they don't get that, also sometimes their way is harsh especially when there is a clash in how we talk about things or approach things [...] I think there is a cultural discrepancy" (Hicham).

7.4 Discussion

7.4.1 Formation of transnational publics of collective action and service delivery

Referring back to the notion of publics (Dewey, 1954; Le Dantec and DiSalvo, 2013), the social movement of Lebanon was comprised of both national and transnational publics with a shared interest and motivation to instil change. These publics which included local actors and diaspora members either separately and/or combined, were distinguished by their permeability since despite the lack of consensus at multiple occurrences, they still brought together stakeholders who most likely would not work together under normal circumstances. The social identity that such publics constructed implied a strong sense of commitment and connection, simply by identifying as being a member of a group (Van Zomeren et al., 2008). In light of rapidly evolving circumstances, the agility and heightened political drive of such publics made it possible to respond to imminent needs on the ground despite multiple hindrances. Similar to Tufekci's (2017) work, such publics were trying to sustain a horizontal and relational structure and were mediated by both live and digital platforms. The sustainability of such publics required infrastructuring (Le Dantec and DiSalvo, 2013) which entailed the creation of socio-technical processes. Such infrastructuring was visible through the combination of various platforms in order to amplify their functions and create

mechanisms of self-organisation and service delivery. While infrastructuring was internal through the creation of solid organisational processes, it was also external by linking both diaspora members and local actors. Consequently, such multi-faceted and transnational infrastructuring, which may be considered a 'social innovation,' led to resources being continuously mobilised and enabled groups and collectives to respond promptly to extenuating circumstances in Lebanon such as the COVID-19 pandemic and the Beirut Port blast.

Nonetheless, despite the avoidance of hierarchies and by ensuring that the wider 'revolution' remained leaderless, several tensions still arose. As networks progressively formed between different national and transnational publics, there were ongoing negotiations to achieve more sustainable and functional structures on the long-term (Tufekci, 2017). This entailed constructing a common ground between diaspora members and local actors and designing processes to build a shared understanding of solutions needed in order to surmount the existing local challenges. There were various issues of trust that were expressed vis à vis certain diaspora groups, and towards local organisations due to divergences in opinions, values, and political agendas. Additionally, from a transnational perspective, while diaspora members managed to work with certain local actors, a disconnect still persisted, especially that some of the diaspora's views could be perceived as tokenistic by trying to advance Western notions of democracy and freedom (Mignalo and Walsh, 2018). While the endorsement of such notions stemmed from a good intention of transforming the political narrative in Lebanon, it may be problematic as it may propagate a knowledge and value colonisation of the Lebanese social movement.

7.4.2 Digital opportunity or digital hegemony?

Social media platforms were evidently fundamental to create and propagate collective action and activism. The plethora of communicative and connective tools (i.e. Slack, Zoom, WhatsApp, Facebook, and Instagram) became 'networking agents' by facilitating the propagation of knowledge, connecting people and instigating action (Segerberg and Bennett, 2011). Nevertheless, there was still an expectation that this was met by offline practices that nurtured human agency, especially that human agency and capital ought to be more valued than technology (Aouragh, 2012). For example, in the case of the social movement in Egypt in 2011, Brym et al., (2014, p. 286), postulated that "*the diffusion of grievances, the structural*

availability of protesters, and especially the embeddedness of protesters in pre-existing networks of civic associations were more significant than Twitter and Facebook." In addition, WhatsApp in particular played a significant role throughout the social movement and could be described as the perceived trigger of protests, the medium through which action was organised, and a threat as its use in such a sensitive context held risks. WhatsApp groups that circulated calls for action and protests brought together people who did not necessarily know each other. Such forms of mobilisation and organisation could lead to circulation of misinformation that can potentially lead to a serious impact (Rossini et al., 2020). Also, the privacy of such groups and the issues being discussed can be scrutinised, especially given that members of such groups could be disclosing sensitive information due to the preconceived assumption that the WhatsApp group was a safe space. Yet, the risk of having such information leaked could put members at risk of persecution from the State and mainstream political parties. This opens the space for questions around the features of communicative tools such as WhatsApp which has taken on bigger roles than expected and which has been on the radar as it announced changes in its privacy policies (Bloomberg, 2021).

Furthermore, while diaspora members were able to engage digitally and remotely, this was not necessarily mirrored on the ground in Lebanon. Platforms such as WhatsApp were primarily used to communicate and coordinate with local actors while other organisational tools such as Slack, that were deemed essential for diaspora communities, were kept for internal processes. As such, there is a subtle risk of creating technical silos for diaspora members resulting in a strong disconnect with the reality back home. The design of technologies that infrastructure the coordinated action of publics and particularly transnational publics, has to start by challenging existing platforms such as crowdfunding platforms for example which render the process of securing funds by and from diasporic communities not responsive to a jeopardised financial landscape in their home countries. This barrier created an additional need for accountability, and raised trust issues regarding campaigns organised by members of the diaspora, as donors needed to know how the money would reach those in need since it was crowdfunding by proxy. Such digital constraints made local actors in Lebanon accountable to the diaspora, consequently reinforcing power asymmetries. Thus, the socio-technical bricolage that took place by re-appropriating existing technologies was a way forward to support, enable, and propagate a political action geared

against systems of oppression. Nonetheless, such bricolage still brings to the fore issues of power and control within a transnational networked public.

In summary, this case study was unexpected as it emerged due shifting circumstances in Lebanon. While there was an existing ecosystem of civic engagement and service provision, it had to metamorphose in light of the unprecedented events that the country was going through. The social movement that evolved from the uprisings that were initiated in October 2019 brought with it a new and more intricate socio-technical ecosystem of engagement, service delivery and activism built on 'publics' including both local actors and diaspora members. Within such an interwoven web of local and transnational 'publics,' tensions arose related to values, political agendas, and modalities of operation. The diaspora had a digital advantage in comparison to local actors. Yet, both sides engaged in a mix of internal and external socio-technical infrastructuring in order to organise efforts which was considered a unique social innovation. Anchored in that space, Daleel Tadamon advanced its own social innovation by attempting to construct and promote an alternative social and economic narrative founded on principles of 'democracy', 'solidarity' and 'social justice.' Engaging in traditional participatory design practices was deemed complicated in such a context due to the prevailing uncertainty and rapidly evolving circumstances including the COVID-19 pandemic and the Beirut Port blast which added further layers of complexity. While the wider social and structural determinants were being addressed through the progressing social movement, the modalities of service delivery and relief it entailed were perceived to be unsustainable with the absence of a public sector which needed to undergo reforms. However, the public sector and welfare services more generally in Lebanon were undergoing an alarming collapse which urged me as a researcher to scrutinise prospects of design and reform in such a context.

CHAPTER 8. DISCUSSION

“Yesterday I was clever, so I wanted to change the world. Today I am wise, so I am changing myself.”

Rumi (*Persian poet, scholar and mystic*)

The three case studies explored in this thesis unveil different experiences and layers of engagements which brought to the fore issues around participation and power. Within such spaces of contestation, the researcher has to shift roles in order to navigate inherent complexities while being truthful to their own research and its embedded values. Digital technology, which has been increasingly and profoundly influencing societies, has demonstrated from this work that digital literacy and infrastructure ought to be integrated into the social determinants of health as highlighted in the introduction of this thesis. In this chapter, I compare and contrast the different contexts of research while highlighting the layers of contestation encountered, problematising participation across these contexts. In addition, I examine the prospects of designing digital technology which aims to support, structure, and propagate social innovation. Accordingly, methodological shortcomings are discussed in this chapter with implications on how research endeavours are subsequently conducted in such spaces of contestation.

8.1 Designing with, for and without communities

In this section, I elaborate on a potential design framework (Table 8.1), examining four dimensions: power, co-creation of value, enactment of agency and sustainable pathways of collective agency and action, which I developed based on my comprehensive analysis of the case studies detailed in this thesis.

	Case study 1	Case Study 2	Case Study 3
Power	‘Power over’ as young people found their autonomy and decision-making power restricted due to hierarchical modalities.	‘Power to’ due to the transition into a more democratic organisational structure which challenged existing modalities and structures of service delivery, welfare, and development.	‘Power with’ since the collective action that was instigated led to massive mobilisation and changes of the existing ecosystem with a certain extent of power redistribution and sharing.
Co-creation of value and collaboration	Power asymmetries hindered the meaningful participation and	Internally, divergent opinions were successfully managed but externally,	Attempt of creating of a third space which did not materialise into long-term

	creation of value for young people and the flow of the process.	conflicting perceptions of participation and differences in values hindered attempts for collaboration.	participation in more structured, innovative and sustainable projects around service delivery.
Enactment of agency	Illusion of agency	The act of resistance has created a form of vulnerability which can be perceived as a core trait rather than a disempowering one. The prolonged sense of vulnerability has pushed these groups to claim more agency and challenge the status quo and dismantle the structures of harm.	
Sustainable pathways of collective agency and action	Voices were heard but not matched with sustainable pathways to actually create a collective agency and action in which participation is equally shared among different stakeholders.		

Table 8.1 Design framework from analysis of the 3 case studies

8.1.1 Navigating layers of contestation, power and social hierarchies

Alluding to the social determinants of health framework that they originally developed, Dahlgren and Whitehead (2021) contend that the social determinants of health framework were solely intended to be a conceptual representation which does not address health inequalities nor elaborates on the interconnectedness of these determinants and the underlying and causal pathways through which such determinants affected health and wellbeing. They instead refer to Diderichsen's, Evans's and Whitehead's (2001) analytical framework around differential vulnerability and susceptibility through which contexts and social stratification lead to differential outcomes. In line with that, this work has combined both frameworks as a lens to explore how contexts of contestation present both explicit and implicit social hierarchies and relationships which subsequently influence service delivery and welfare, and social, economic and health outcomes more broadly. The focus was particularly on civic engagement as a core pathway in the context of Lebanon particularly that NGOs, international organisations, and grassroots organisations have created their own ecosystem in parallel to the public sector and sometimes in friction with it.

In light of the October 2019 uprisings which progressed into a social movement, the friction and stratification have been further accentuated emphasising the magnitude of the impact of such determinants on the functionality of a country. The most salient factor that tied processes and pathways through which different structures were operating and co-existing was 'power.' Power is a key political lens to understand the underlying social mechanisms of social determinants which led to inequities (CSDH,2010). Lutrell et al. (2007) discussed the

four approaches around power relationships: power over (ability to pressure or influence), power to (changing existing hierarchies), power with (from collective action) and power within (power from within the individual) and the empowerment pathways in response to such power relationships. In each of the case studies, the depth and breadth of participation by those involved - reflecting underlying power relationships and structures - varied considerably due to an array of factors such as the organisational culture, the context, and the scope of the work.

Working with the International Humanitarian and Development Organisation (IHDO) and its national organisations, the scope of work was targeted at understanding the experiences of youth volunteers and particularly the prospects of digital innovation across different sectors. The case study in Chapter 5 provided an introspective look into mainstream large-scale organisations which mostly worked with young people as beneficiaries. Engaging with PD methods within such spaces was problematic because while young people were involved in the activities being conducted, they did not have a say on the type of activities or were excluded from potential next steps since staff members took control of the narrative. This case demonstrated the 'power over' type of power relationships since young people found their autonomy and decision-making power restricted due to hierarchical modalities of operation. This modality of project design and implementation is very common particularly in under-developed and developing such contexts because local mainstream organisations who work with organisations similar to IHDO are forced into functioning through 'adjustments' that are relevant to their donors' agendas (AbiYaghi, Yammine, and Jagarnathsingh, 2019; Mansour 2017). As such, projects are moulded to respond to international priorities leading to a more rigid structure in order to preserve funding channels which become *the raison d'être* of these local organisations (AbiYaghi, Yammine, and Jagarnathsingh, 2019).

On the other hand, when working with small-scale, self-organised youth groups, the case of 4 all Causes demonstrated 'the power to' approach particularly due to the transition into more democratic organisational structures which challenged existing modalities and structures of service delivery, welfare, and development. In order to properly engage in a PAR process relying on PD methods of design, it was essential to examine the existing embedded infrastructures within the organisation. If an organisation did not have a predisposition to accept democratic and participatory processes, it would hinder any attempts to engage in

participatory processes which aim to democratise the operationality and structure of the organisation. Nonetheless, despite the eagerness to endorse such participatory and democratic principles, it was still necessary to negotiate across divergences in opinions, ideologies and visions to reach an agreed upon collective identity as was the case with 4 all Causes. In contrast, the experience with GoF was particularly interesting as it pushed me to revisit my own assumptions as I thought that equitable participation was going to be more pronounced and that such small-scale and community-based organisations were more receptive of PD processes. A participatory culture within such a structure was not necessarily a given despite members of such groups claiming that they endorse a participatory and bottom-up approach. It was highly challenging as a researcher to be the one pushing for more participatory approaches to implement projects while the member with the decision-making power did not see the value of this and thought that the existing process was more effective and efficient.

The case study around the social movement highlighted different power relationships, but predominantly the 'power with' type, since the collective action that was instigated led to massive mobilisation and changes of the existing ecosystem with a certain extent of power redistribution and sharing. In light of this evolving context, similarly to Muller (2003), I attempted to create an independent 'third space' (in-between space) which did not belong to any of the stakeholders as an attempt to foster power-sharing and to create a common ground. While people actively participated in dialogue within such a space, it did not materialise into long-term participation in more structured, innovative, and sustainable projects around service delivery and addressing the structural challenges encountered by all of them in a more systematic manner. The ecosystem was very complex due to the fluctuating and intricate formation of publics whether national or transnational and their underlying socio-technical infrastructures. The grassroots organisations and diaspora groups that were involved in the case study of Chapter 7 were engaged in their own DIY (Do It Yourself) mode of civic engagement and innovation as a way to overcome the shortcomings of the public sector and the ruling political parties. As Caldwell and Foth (2014) argue, it is key to engage in co-design of services with communities through innovative means which entails re-configuring relationships between institutions and citizens, enabling citizens to self-organise and address their own community needs. However, in the context of Lebanon, grassroots organisations and opposition groups lack trust vis à vis the public sector and governmental entities and even

among each other, which pushes them to create parallel structures of service delivery. In a very unique manner, the aftermath of the Beirut blast in August 2020, led to massive civic mobilisation by such entities while in contrast governmental entities were absent. Despite the multiple efforts to bring together different stakeholders who ostensibly shared a common agenda, it was not effective nor efficient and efforts did not materialise into a shared outcome. The team of Daleel Tadamon (Solidarity Directory) eventually had to take matters into their own hands and plan, design, and implement subsequent activities that they deemed relevant. As such, the principles embedded within PD such as democracy, equitable participation, cooperation, and social justice, need to be aligned with and optimistically remedy in a non-coercive manner current practices surrounding an existing social innovation. Therefore, a start would involve building an understanding of what participation means to individuals in these different spaces, as this will provide insights on the extent of applicability and adaptability of the different principles and processes of PD and participatory research more generally within the context in question.

Through the three cases studies, it was highlighted that power asymmetries and tensions between different entities render it very challenging to infrastructure social innovation on a wider scale. Sawhney and Tran (2020, p. 172) posit that there has to be room for a “*conflictual consensus*” concurring with democratic values as a replacement to tokenistic participation and forced choices. While this is valid, the multi-layered complexity of these power struggles may imply that such a consensus may not translate into actual outcomes. Hence, these power struggles have led to people not necessarily benefiting from mutual learning nor being able to cooperate and break through their silos. As Caldwell and Foth (2014) suggest, this urges us to look for an alternative model for democracy and self-organisation. A contextual model of democratised services and structures has proven very challenging to establish while relying on PD techniques. This is predominantly due to the weakened welfare system and proliferation of civic entities and civil society organisations which lack adequate cooperation mechanisms and engage in an increased competition over resources which is a severe sign of fragmentation (AbiYaghi, Yamine, and Jagarnathsingh, 2019). This fragmentation is exacerbated by issues of ‘ego’ and value clashes, which I witnessed first-hand. Prior work of PD has been conducted in non-Western and non-Scandinavian contexts. Such work highlighted certain shortcomings of traditional PD practices, tensions around participation, and the importance of embracing dissensus during design endeavours. Nevertheless, in a

context such as Lebanon, such dissensus and tensions were unsurmountable and proved to be harmful rather than enabling a sustainable collective action.

8.1.2 Creating avenues of enacted agency

Co-designing and co-delivering modes of service delivery emerge from locally defined needs and solutions (Saad-Sulonen et al., 2020). Researchers engaging in service design recognise that services are not only complex but also a medium and an engine for societal transformation. Ideally, this would translate into more collaborative, empowered, sustainable, and creative society and economy (Crivellaro et al., 2019). Working within the different settings, while the scope was to explore the ability to co-design processes of service design that would achieve better health, economic and social outcomes, it was equally important to engage in co-creation of value for those involved. As Saad-Sulonen et al. (2020) postulate, service design is therefore channelled to enable different actors to share common resources, products, knowledge, and infrastructures. They are not perceived as passive receivers but as active partners in the value creation processes (Saad-Sulonen et al., 2020).

In order to create these shared pools, we need to create new participation processes grounded in the existing practices of these groups. It also entails inciting a dialogue across entities that are looking for this similar value and align between them. Nevertheless, participation on its own as a concept is not sufficient; the ultimate goal is to create avenues for members we are working with to enact their agency and take control of the narrative. As such, the aim is to avoid pseudo-participation in which the agency of those involved in the design is compromised, as they are considered a source of data rather than decision makers. Therefore, the resulting systems that are created ought to expand their roles beyond data collection (Palacin, 2020). Agency in itself is a fluid concept that carries with it controversial and conflicting theoretical underpinnings. It is referred to as a 'black box' (Coffey and Farrugia, 2014) since in youth studies in particular, it holds different conceptual controversies. It is pivotal to acknowledge that agency is tied to subjectivity, social institutions, discourses, and structures. As a social category, young people's identities, experiences, and depth of participation geared towards radical change of structural conditions of oppression are culturally constructed and intensely influenced by issues of power, authority, capability, autonomy, and agency (Durham, 2004). Having that in mind, when approaching the different young people encountered through this research, the experiences were strikingly different

and this was attributed to a myriad of factors such as gender, race, politics, religion, socio-economic status, context, history, and culture (Khan, 2018; Börner, Kraftl and Giatti, 2021). Working with young people, particularly in spaces where their participation in civic and political life is jeopardised, encompasses multiple hindrances especially when attempting to create avenues for them to enact their agency.

For young volunteers of IHDO and its national organisations, there was an illusion of agency as some of the staff members thought they were creating opportunities for young people to have more decision-making power. However, while benefiting from the civic experience with IHDO and recognising the value of its humanitarian mission and services, the sustained lack of opportunities to enact agency is slowly pushing young people to leave the organisation and turn to other structures in which they are able to enact their agency and deliver more responsive and better suited services. In organisations such as IHDO (Chapter 5), the best way forward is through a top-down practice which supports and calls for more bottom-up practices and endorses alliances both vertically and horizontally. In the case of grassroots and small-scale NGOs in Lebanon - whether structured, unstructured, pre-existing or emerging from the social movement of October 2019 - the very act of resistance has created a form of vulnerability which prior work (Butler, Gambetti and Sabsay, 2016) perceives as a core trait rather than a disempowering one. The prolonged sense of vulnerability has pushed these groups to claim more agency and challenge the status quo and dismantle the structures of harm (Agid, 2018). Thus, the collective agency that has emerged from the galvanised activist networks has managed to sustain a certain momentum which unfortunately started progressively declining. This is because participation in itself does not translate to agency. Making voices heard is necessary but does not suffice to materialise into the goals behind participatory processes (Frauenberger, Foth, and Fitzpatrick, 2018). In the case of this research, through different channels of participation, voices were heard but were not matched with pathways to actually create a collective agency and action in which participation is equally shared. Only in the case of 4 all Causes was this possible, but it also entailed finding similar structures and mindsets and potentially devising tactics to encourage others to unite towards the greater good. Another problem that arises from such participation is the possibility that those involved will not be able to provide solutions that actually benefit them and the feedback provided might be more damaging than beneficial (Frauenberger, Foth, and

Fitzpatrick, 2018), as witnessed by working with GoF and some of the entities of the social movement in Chapters 6 and 7, respectively.

8.2 Designing for technology-supported social innovation: relational modalities of collective action

8.2.1 'Infrastructuring' social innovation

Social innovation flourishes in troubled spaces in which services are suffering. In the context of Lebanon, being a highly NGOised country with a historical aid mandate (AbiYaghi, 2014), a parallel structure of services and welfare has grown exponentially. This prompts building "*milieus for innovation*" (Björgvinsson, Ehn, and Hillgren, 2010) which entails infrastructuring such social innovation through the re-appropriation of existing tools as demonstrated in Chapters 6 and 7. When designing services that stem from social innovation, people are at the centre rather than systems, structures, and commodities (Murray, Caulier-Grice and Mulgan, 2010, p. 5). It is important to concede that within a specific context, there is a multitude of "*structures and ecosystems which are multi-layered and often nested*", and cross-cut micro, meso and macro levels (Lusch and Vargo, 2014, p. 25) which aligns with the rationale of the social determinants of health framework. Referring back to Manzini's design mode map (Figure 8.1) as an analytical lens, this work attempted to create an emerging culture which brought together diffuse designers and expert designers including: grassroots organisations, activists and mainstream organisations (which possess considerable resources) in order to collectively structure the existing ecosystem in a manner that adequately addresses structural and intermediary determinants affecting health, social, economic, and political outcomes. However, working across the confined boundaries of alliances between organisations can be difficult. It requires trust and a collaborative approach between the various stakeholders (Jégou and Manzini, 2008) which are often missing or there is a severe mismatch across the spectrum of actors (Crivellaro et al., 2019) as demonstrated in the different case studies.

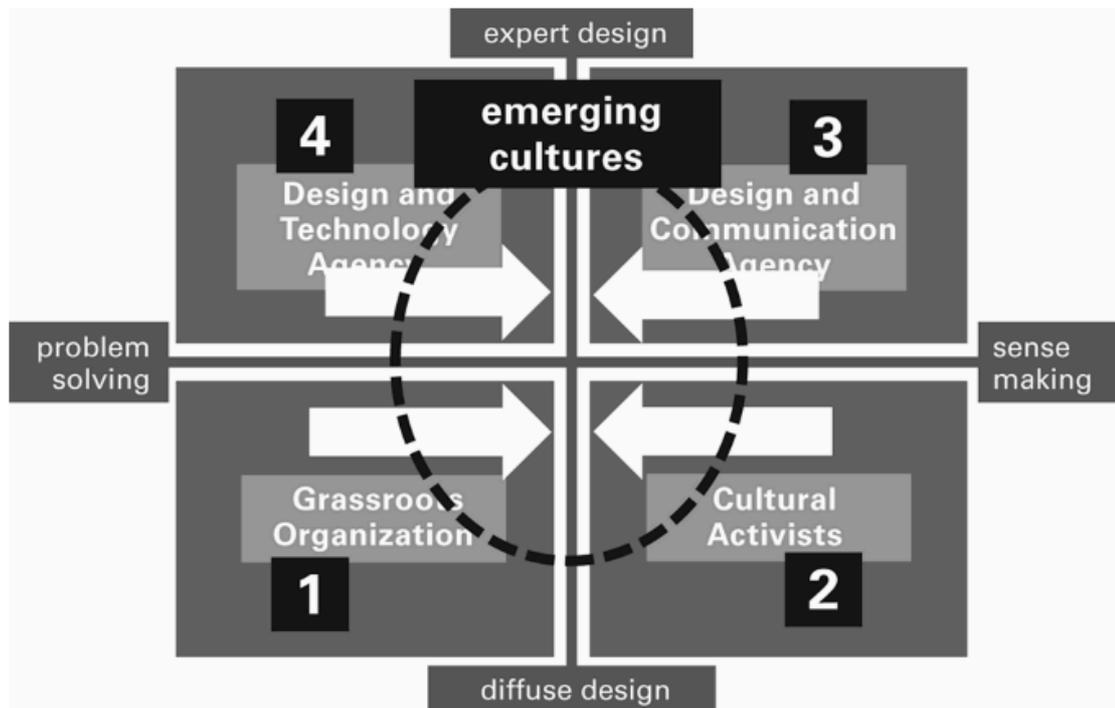


Figure 8.1 Design Mode Map and Emerging Culture of Design (Source: Manzini, 2015)

It was critical to investigate the different underlying infrastructures across the different settings described in Chapters 5, 6 and 7. Such infrastructures define routine engagements whether upfront or from behind the scenes with outcomes that can either be positive or detrimental (Semaan, 2019). Such infrastructures determine the course of action as a result of their embedded principles, values and biases which can be exposed due to disruption. In this work, two design pathways of infrastructuring unfolded in line with the framework of Teli et al. (2020) mentioned in Chapter 2: institutioning and commoning. Working with organisations focussed on the institutioning of PD: either by staff members soliciting me to get involved to pursue their own interests as the case in Chapter 5 which is referred to as ‘co-optation’ or through ‘intermediation’ as evidenced by the work with 4 all Causes and GoF in which I strategically approached them for my research (Teli et al., 2020). On the other hand, the research around the social movement organically unfolded since I explored and engaged with publics and entanglements that naturally formed. I tried to investigate their internal and external infrastructures which Teli et al. (2020) describe as ‘commoning’. While design pathways shifted depending on the circumstances at hand, a common approach was to ensure that the different stakeholders were involved from the outset of the project which might include digital technology. This resonates with previous work which indicates that such

involvement cultivates community members' sense of ownership over any technological interventions (Balestrini, Rogers and Marshall, 2015; Balestrini et al., 2014; Hayes, 2011).

It was demonstrated across the case studies that digital technology can play a role in facilitating social exchange and social attachments between different actors across different dimensions. Nevertheless, designing technology within spaces of contestation and deep divergences requires a lengthy period of time and cannot be achieved in short-term engagements, especially if we are aiming to empower communities and encourage them to appropriate technologies at a grassroots level. The same applies for hierarchical large-scale NGOs, in which it takes a decision from leadership, resources, and the readiness to engage in this transformative journey. In such organisations, researchers are on the quest of dismantling ongoing infrastructures of subtle colonialism (Dourish, et al., 2020). Such design efforts imply iteration until reaching the desired outcomes. However, iteration necessitates patience, acceptance of uncertainty and constant change (Dourish, et al., 2020), and a commitment to a time-consuming process which many entities cannot afford due to the shifting circumstances within volatile contexts.

8.2.2 Connected networks based on relational technologies

Bødker and Kyng (2018) argue that PD is suffering from a lack of high technological ambition and there is a pressing need to envision better technological futures for people, ones that counteract the effects of current non-democratic technology platforms. While what Bødker and Kyng (2018) propose makes sense from the lens of moving control over technology back to citizens, in a context such as Lebanon, this is not realistic. As the situation on the ground indicated, social media and synchronous messaging systems (e.g. WhatsApp, Signal, Facebook) were widely used for internal and external purposes. These tools have been playing a crucial role at the level of livelihoods of people and are particularly integral to organisations. This was further supported by the evolving uprisings of October 2019 which were triggered by numerous indirect causes and a direct cause which was the proclaimed tax on WhatsApp. WhatsApp was very enticing in such a context because of its features including encryption and because it facilitated the formation of collective identities and solidarity networks both internally and at a transnational level (Pereira and Bojczuk, 2018).

However, the approach of such companies has generally been scrutinised as being a new form of colonisation. Here, I found myself investigating locally situated opportunities for digital innovation that could be well received by NGOs and grassroots. This was fundamental because infrastructure accessibility as Bjørn and Boulus-Rødje (2018) argued in their work around tech entrepreneurship in Palestine, was a main factor which determined the diverse opportunities that organisations and activists could access. The strenuous economic situation of Lebanon renders it very challenging to secure funding for technological endeavours resulting in digital technology being too costly for the non-profit sector. Infrastructural obstacles such as electricity cuts (reaching up to 21 hours), limited connectivity, and discrepancies in digital literacy are additional obstacles hindering significant progress in that direction.

Activist efforts definitely require tailored mechanisms that support their models of service delivery, granting them more control and agency. Caldwell and Foth (2014) imply that whilst such activists and grassroots organisations resort to existing platforms for multiple purposes including activation, mobilisation, and collective action as described in Chapter 7, they are confined to the boundaries of and parameters of such platforms. Nevertheless, through this research, it was demonstrated that such constellations of actors were able to overcome such restrictions and create their own adaptive socio-technical infrastructures as evidenced in Chapters 5 and 7 by connecting several tools and platforms. Furthermore, the development of contextual relational technologies, as exemplified by research in digital civics (Johnson, Al Shahrabi, and Vines, 2020; Prost et al., 2019, Dow, Comber, and Vines, 2018; Johnson, et al., 2016; and Vlachokyriakos et al., 2014), has the capacity to infrastructure different modes of collaboration and ultimately create avenues for a more pronounced agency. In the long-term, relational infrastructures might potentially include tools that make existing open-source platforms more accessible to grassroots organisations in particular, through for example, protocols and technical frameworks (e.g. distributed ledgers supported by the Blockchain technology¹³).

Work centred on technology-supported social innovation in service delivery and collective action highlights the importance of scaling out and up, by transposing democratic processes into the realm of the public sector for greater impact and sustainability (Frauenberger, Foth,

¹³ <https://www.euromoney.com/learning/blockchain-explained/what-is-blockchain>

and Fitzpatrick, 2018). This is a core premise underlying the new PD rhetoric especially that the public sector is funded by taxpayers' money and thus more work needs to be done within that sector to make it more responsive to the needs of communities. In a context as complex as Lebanon - where corruption, sectarianism and clientelism are intertwined within governmental entities and a lot of mainstream NGOs alike - pursuing such an endeavour is problematic, if not impossible. In such spaces of contestation, researchers will find themselves reaching for a balance between what is considered useful and contextually relevant by 'communities of interest' and what research interests and funding demand. As mentioned earlier, PD and service design could converge over the design of relational technology underlying social innovation whilst developing richer understandings of participation (Saad-Sulonen et al., 2020). Nevertheless, tools which are mostly quick ways to "fix or pin down" very messy realities are insufficient, and thus there is a need for more fluid approaches (Agid and Akama, 2018). In the different case studies the initial technology-centred interests around the ways to design technology to support social innovation for collective action were either side-lined or re-routed by more immediate organisational needs and the contextual realities on the ground.

8.3 The research identity crisis

8.3.1 Reflecting on methodology and methods

The foreground of conducting research within contested spaces is interrogating our own position particularly in participatory processes which are dynamic in nature and reflective of realities on the ground. From a methodological lens, the researcher's own assumptions and values drive the socio-technical processes which are proposed (Crivellaro et al., 2019). This overall research endeavour was anchored within critical realism and relied on methodologic pluralism to achieve its aspired goals and to respond to the different research questions. PAR, which is the overarching methodology, is the subject of critique as *"its participation, democracy and external ownership aspects can greatly reduce the validity of the research and the rigour of the methods used, and question whether PAR methods lead to good, scientific, valid, reliable, usable research outcomes"* (Walter 2009, Chapter 21 p. 6). Hence, it is considered an impractical research methodology due to the labour underlying it particularly due to its iterative nature and its reliance on a democratic approach which can lead to conflicting agendas (Walter, 2009) as highlighted in the different case studies. However, because my research extended over a substantial period of time and included practical

activities carried out during the PD workshops, I was able to put PAR into practice and have solid outcomes which were deemed important to the different partners. The mix of methods was necessary to consolidate the findings across case studies but also granted a unique richness and depth to findings.

Moreover, the core premise of this research was to create better participatory research approaches and avenues of agency for those involved. The first step entailed consistently referring to those who participated across cases studies as 'members', 'groups, and 'young people', overcoming the terminology of 'participants' which in itself holds a certain layer of power imbalance between the researcher and those who are 'chosen' to participate in the research. Even a simple change in terminology reflects a commitment to enact the values of participatory research, co-creation, and design. In theory, both the methodology and methods were adequate and had clear underpinnings that guided research activities. However, these methods fell short in contexts of uncertainty and crisis. Within such a realm, people do not have time to engage in envisioned processes and demand fast solutions, fast solutions may come at the expense of democratic and participation ideals.

Engaging in PD methods and critical ethnography in a context such as Lebanon pushed me as a researcher to take a step back and rethink how I configured my methods and design goals. One of the tensions underlying PAR is the depth and breadth of participation by those involved in the research such as considering whether members of communities have to be involved in the analysis and dissemination components of the research (Caretta and Pérez, 2019). The variance in the configurations I was working with implied different modes of engagements depending on the qualities and the value system that underlay them. The format of engagements had to be discussed with those involved prior to execution. Due to the transnational nature of the research and the technical knowledge and skills required to conduct analysis, I did not actively engage members in the analysis but relayed back main findings to get their approval. I ensured that any outcome intended for dissemination was checked by them. Two elements that were highly successful were: 1) adopting an immersive approach which resulted in a strong relationship of trust (Brereton et al., 2014; Segalowitz and Brereton, 2009) and 2) transferring the development and facilitation of activities/workshops to members whenever possible while stepping back as a researcher. Documenting participatory practices of groups of interest was a pre-requisite before embarking on a PD

journey which was not possible with IHDO, as this enabled me to recognise the limitations of the processes and mitigate for any rising uncertainty which continuously shifted the research agenda or as the case with GoF, brought an end to the research endeavour.

Being reflective of the work carried out throughout this PhD, the problems encountered were undeniably 'wicked' problems. The main concern that emerged by the end of the research engagements was *how can one re-configure entire models of service delivery in a country with a collapsed economy, with severe shortages in basic needs' supplies, depreciation of the local currency, political instability, and a pandemic?* Research resources alluded to some of the complex challenges but did not provide pragmatic advice on how to react to such a situation. A greater ethical dilemma arose which was the controversy of carrying on with research activities amidst the ongoing struggles that members were confronting while recognising that such research might not relieve those struggles. Methodologically, and being self-aware of the shortcomings of transnational research, the most promising positive outcome in potentially achieving the aspired radical change on the longer term was working closely with the members of Daleel Tadamon. I eventually co-initiated with them a unique community-driven local social innovation hub, rooted in the Lebanese context and aimed at addressing problems identified through localised tools, infused by best practices from other similar contexts. The hub distinguished itself by aiming to develop toolkits and approaches which are both contextual and innovative but most importantly participatory. Acknowledging the challenge of creating pathways for collaboration across different entities, the hub intends to create a 'third space' in which all entities can meet, discuss, and reflect. In order to do that, we created processes among which some were influenced by those I used in my PhD journey. A key prospect for the hub is attempting to re-imagine a map of Lebanon built on the relations and networks developed between grassroots organisations, local social and solidarity enterprises, cooperatives, and activists. It will go further to support people in building their own solidarity enterprises based on values which are in contrast with the prevailing system. On the long term, this paves the way for more viable change while aiming to deconstruct the various entanglements of the existing ecosystem.

8.3.2 Alternating and combining a multitude of roles: the researcher, the facilitator and the activist

Being at the intersection between these different ecosystems of civic engagement conferred a big responsibility. This required I constantly question my own epistemic authority which is always put to the test during a participatory action research endeavour (Caretta and Pérez, 2019), especially as I came in with the privilege of resources and technical knowledge which could have led to power imbalances if I have not been self-aware of my actions, biases and the influence of my opinions. As an outsider, I was granted the approval of divergent actors across all three case studies to instigate and facilitate dialogue. By working with small-scale, mainstream, and grassroots organisations in Lebanon, such dialogue took place at various instances, but circumstances did not permit it to be translated into a unified collective action. I had to practice my own analytical sensibility in order to simultaneously connect and comprehensively understand the collaborative and distributed engagements that were taking place (Bjørn and Boulus-Rødje, 2015). Consequently, the following tensions and realities stemmed for the different research endeavours:

- Blurred boundaries

Drawing boundaries across the different roles of the researcher is pivotal especially if, as in my case, the researcher is a native of the country where the fieldwork is being conducted. The research conducted was inherently political, which rendered it extremely challenging to disassociate between my researcher's hat and my activist's hat. Participating as 'activists' (Manzini, 2014) in socio-politically charged contexts, specifically by supporting and enabling social innovation to evolve, and by challenging existing realities denotes a political statement. The moral, ethical and political implications have been a strong drive to sustain the drive of the work with groups in Lebanon. This aligns with Le Dantec and DiSalvo (2013) who argue for a move from 'designing for use' to 'creating fertile ground to sustain a community of participants.' Being personally invested in the causes at hand, as a researcher I found myself engaging in activities outside the scope of the research plan. In addition, personal bias influenced by impartiality affected my stance towards certain stakeholders which were not necessarily aligned with the same political stance. As such, it was imperative for me to be self-reflexive (Finlay, 2002) and enact self-disclosure by conveying my biases to my supervisory team who was not directly involved in the fieldwork to re-direct the research towards its goals (Duysburgh and Slegers, 2015).

- Shifting power dynamics

Cultural and socio-political factors may hinder the possibility of a meaningful collaboration and exchange between design experts and researchers and people on the ground who design their own solutions to everyday problems (i.e. what is also referred to as diffuse design). In Vlachokyriakos et al.'s work (2018) and infrastructuring work more generally (Clement et al., 2012; Le Dantec and Carl DiSalvo, 2013), researchers have to dynamically change roles. In this research, I found myself navigating within spaces ranging from sense-making to problem-solving and advocacy. Members who were involved in the research had built an expectation that I was now a member of their group such as the case with 4 all Causes and Daleel Tadamon. Being perceived as the person with 'expert' knowledge who has solid networks can unintentionally place the researcher in a position of power. For example, at different instances, members would solicit opinions and decisions to be taken on their behalf. From an ethical standpoint, it was pivotal for me to recognise when I was becoming too involved and pushing forward my own opinions instead of supporting members' practices. As such, the researcher has to constantly try to assume a more advisory position, and to ensure reciprocity by shifting back the decision-making to the members or stepping back from the discussion to prevent taking control over the narrative (Bossen, Dindler and Iversen, 2010).

- Discrepancy between research requirements and available resources

Engaging in embedded ethnographic research requires considerable time especially in a contested context with fluctuating circumstances, and a protracted crisis with long-lasting consequences. Conducting critical ethnography more specifically, which dictates action to challenge conditions that underlie the lived experiences of communities of interest and designing responsive, useful, and agile solutions, incurs a need for additional resources to be mobilised which are often not provided by academic institutions. In this case, I had to be resourceful and actively sought to build a network between various key players who could potentially exchange resources and expertise. Yet, the challenge encountered was ensuring that all stakeholders shared a similar value system and were politically aligned.

- Promising impact and sustainability

Research endeavours in a contested space cannot only lead to transient action or the development of a digital tool without factoring in community practices that will be built around it. There is an expectation from communities, noticeably within civic and activists' circles to have a sense of ownership by engaging with sustainable actions that mitigate for

prevailing social, economic, and political conditions and to work on opportunities for scaling out for bigger impact. Hence, as a researcher the key is to: 1) manage expectations from the beginning without creating dependency, 2) create solid inter-linkages between similar groups and 3) capitalise on off-the-shelf technologies that are already embedded within such communities and build more sustainable social processes around it.

- Ongoing engagement beyond the end date of the research endeavour

In such complex research, an exit strategy has to be careful of through processes that transfer ownership of any outcome to those involved and by creating conditions of self-independence. The end date of research does not entail ending the relationship with local partners and collaborators particularly when those are not well-resourced large-scale organisations. While data collection might come to an end and resulting tools or projects are already implemented, as a researcher, one is considered a trusted and valorised person with whom members of groups would want to maintain a personal connection and will continuously resort to for advice or requests. This can become overwhelming over time, thus the importance to manage these relationships in a manner that does not offend the members but also gives the researcher the option to disconnect when it is needed. In my case, I left a detailed roadmap for IHDO with recommendations around their engagement strategies. As for 4 all Causes, they took over full ownership of the community map and had a clear manifesto to support their work. In addition, Daleel Tadamon managed to create a legal entity which is the social innovation hub with access to different resources and networks.

- Emotional and mental fatigue

Being personally implicated in the research by actively engaging with civic groups and activists' groups beyond mere research expectations can take a toll on the researcher's emotional and mental state. As a researcher, I was also vulnerable within an emotionally and politically charged context such as Lebanon. A sense of responsibility was always looming which impeded my perception of this work solely as an academic research endeavour. This was accentuated by my urge to find solutions to challenges which were described earlier as 'wicked' problems. Hence, it was important to detach myself from the research at various instances and to confide my concerns with the rest of the team to avoid burn out. For example, after the entire year of 2020 and the Beirut Port blast more specifically, being excessively engaged in different non-research related activities with the groups I had been working with while trying to create meaning from my research findings during such troubled times, proved

to be overwhelming. I felt I was drained after so many attempts to create a meaningful and sustainable impact from my work with the groups despite all the encountered obstructions.

In summary, through this chapter, I surfaced the interlinkages across the three different case studies with their distinctive experiences and realities. Each case study brought forward its own lessons, tensions, and implications on the design and/or re-configuration of services while emphasising the methodological challenges that were encountered in such contexts. Within such spaces of contestation, nothing is evident and as researchers, we need to collaboratively co-create practices with those involved in a meaningful manner while deconstructing our own assumptions and attachment to our research training and academic background.

CHAPTER 9. CONCLUSION

“We are doomed by hope, and come what may, today cannot be the end of history.”

Saadallah Wannous (*Syrian playwright*)

In conclusion, ***how can we surface, structure, and scale youth-driven social innovation for service design and delivery, through participatory methods within contested spaces?*** This work which is comparative in its nature unraveled a multi-faceted response to this research question through the cases studies which shared similarities and had noteworthy differences. It was demonstrated that social innovation could transcend the common Westernised understanding of the notion, particularly if it is driven by young people in contested contexts. Within contested spaces and during turbulent times of uncertainty, social innovation can take on many forms and manifest itself unexpectedly.

This research endeavour drew on existing literature around social innovation, civic engagement, HCI, PD and public health while zooming in on the distinctive context of Lebanon. The amalgamation across different disciplines and frameworks is a core conceptual contribution of the work presented in this thesis. Referring to the social determinants of health framework by the WHO, both structural and intermediary determinants have been deemed to influence health and wellbeing outcomes and to strongly affect inequities. This work aimed to investigate the mechanisms through which such determinants can be addressed and even more so, challenged. Conceding that civic engagement encompasses an array of dimensions as explained in Chapter 2 and in light of the rise of technology as a super determinant, it was necessary to examine the intersection between HCI and civic engagement more closely. While such an intersection has been studied, this work took it further by focussing on social innovation as a model. The rationale behind this choice is because in contested spaces in which mainstream pathways of services, welfare and development are often fragmented, politicised, and further proliferate prevailing inequities. As a response, communities, and young people in particular, have devised their own mechanisms to challenge and overcome such shortcomings. Therefore, they constructed their own infrastructures which are often mediated through ICTs. From that perspective, this work is distinguished conceptually because it did not only document such occurrences of social innovation but aimed to introduce participatory methods, which are quite novel for the context of interest, to structure it and ensure its sustainability.

The main findings reflected the value of existing frameworks around social innovation and design, such as the design mode map of Manzini (2015) in creating alliances and Teli et al.'s (2020) framework for infrastructuring (as a design pathway) in structuring and scaling innovation in different types of organisations. However, the inherent power asymmetries and conflicting values of the different stakeholders and organisations encountered, which work around PD traditionally embraces, are a barrier that warrants its own contextual mechanism to be addressed. Furthermore, this work did not only examine PD within organisational settings but also within informal configurations such as those within a social movement. This was intended to expand PD's scale and to use it as a means to incur a paradigm shift in a prevailing culture, and to create better conditions of engagement and collective action founded on democratised models and infused with values of social justice. Hence it would eventually create avenues for an improved enacted agency.

From that standpoint, as mentioned in the introduction, this work had various aims which were addressed through the cases studies. The first two aims of this research endeavour were to: 1) understand youth participation within large scale NGOs through a comparative lens of three different contexts and 2) explore the multiple facets of youth civic engagement within Lebanon to have a better understanding of civic realities on the ground. The first research aim was addressed through the case study with IHDO and its national organisations. I was able to surface the existing internal politics, organisational culture and operational modalities of large scale and mainstream NGOs, which are prevalent across the world. Such organisations invest in community development projects and try to remedy the shortcomings of governments in developing or underdeveloped countries. More generally, the humanitarian and development sectors attempt to influence the wider social determinants, but specifically target intermediary ones within a country, which is a reductionist and often non-contextual approach. It often ends up amplifying existing inequities instead of downplaying them. In my case study, the power dynamics within IHDO and between organisations across contexts reflected a wider problem related to how services were configured within such spaces and how young people were not given enough decision-making power despite their proven ability to innovate and to find solutions to challenges that older generations have failed to address. Additionally, ICT for development has been increasingly shaping the mandates of such organisations which have very advanced technological ambitions in spaces which still suffer from infrastructural problems, hence the need to re-design processes of engagements by

relying on local knowledge and expertise and to create adequate relational conditions for meaningful participation. This can ultimately confer agency to communities to be able to take control of their own realities.

As for the second research aim, the exploration phase described in Chapter 3 provided an insightful account around civic engagement and activism in Lebanon, which is considered to have the “*most diverse and active civil society in the [MENA] region*” (Hawthorne, 2005, p. 89). Civic engagement is also a core pathway for the operationalisation of the country especially in light of the weakened governmental and public sector services, conferring significant power over the service and welfare sectors to non-State actors. Yet, civic organisations, NGOs, and civil society often find themselves stuck in implementation roles through service delivery, welfare, and relief efforts. This raises questions about the effectiveness, efficiency, and impact of these structures after so many years on the ground especially considering that structural determinants remain in place and inequities are not decreasing (AbiYaghi, Yammine, and Jagarnathsingh, 2019). This was further evidenced through the work described in Chapter 5 particularly by working with the Lebanese Organisation (LO) which is the largest national organisation in Lebanon which mobilises young people and provides an eclectic range of services. In contrast, within such a landscape certain self-organised structures such as 4 all Causes and Gift of Food, while addressing intermediary determinants, also aim to invoke change at a structural level. In the case of 4 all Causes this is achieved through re-configuring health services and relationships, and by endorsing a more holistic approach in responding to people’s needs. In line with that, research aims three and four were respectively: understanding how PD can be fostered within varied configurations of youth civic engagement that focus on service delivery and welfare within Lebanon and investigating the possibility of infrastructuring social innovation to re-define service delivery (i.e., health services and welfare) and challenge the existing narrative of the public/private sectors of Lebanon. Working with 4 all Causes was aligned with both aims. It indicated that social innovation could be structured and propagated if social attachments built on trust, participation and co-design were fostered in order to put design into action, leading to innovative services, structures and approaches. It was necessary to shift the initial research interest to focus on the organisation’s internal modalities, values, and structure before investing in innovation efforts. The negotiations that took place through the different phases culminated into a shared understanding of

democratic participation and social justice which were later on translated in the organisation's work on the ground.

In Chapter 7, the work responded to research aim four (mentioned above) and research aim five which was to investigate the emerging socio-technical infrastructures underlying participation, civic engagement, and service delivery in times of crisis. The transnational Lebanese social movement which developed from the October 2019 uprisings introduced a new ecosystem. In such an ecosystem encompassing both local and transnational actors, existing infrastructures and social hierarchies were altered in response to the realities on the ground. Even depoliticised infrastructures of collective action endorsed a political stance by being in a state of friction with the State. The newly configured socio-technical infrastructures weaved together familiar and widely used platforms which led to the mobilisation, self-organisation, and collective action among several entities who would not have worked together under other circumstances. The socio-technical bricolage that took place enabled the social movement to be sustainable and to metamorphose with each unexpected event such as the Beirut Port blast. Such infrastructuring highlighted how services and processes of collective action can be moulded into being relational and proposed a more successful model in comparison to the prevailing sectarian, clientelist and elitist model. Nevertheless, designing in such a space still carried with it tensions and friction between the different stakeholders particularly due to divergence in values, modalities of operation, and priorities. While the wider social movement had a unified stance against the State and mainstream parties, the more detailed decisions around the course of action were divisive. Consequently, in order to engage in participatory and service design in such a context, it still requires involving the public sector in order to converge and negotiate around those divergences and scale out such operational models.

The exploration phase coupled with the three case studies warranted findings which address research aim six by providing a comprehensive account on the intersection between PD, social innovation, and youth civic engagement specifically in contested spaces. The cumulative findings and analysis from the different engagements provided insights related to each type of structures but also reflected cross-cutting reflections and implications.

For those pursuing similar research endeavours, the core strength of this work was in its methodological approach in which method pluralism was adopted and was combined with a pragmatic approach ensuring that each setting was handled with the most suitable approach and techniques. In addition, it was demonstrated that within contested spaces, engaging in embedded ethnographic research was crucial in order to build a responsive practice-driven agenda, including participatory and service design tools. From the lens of critical ethnography, developing an understanding of the prevailing practices enabled me as a researcher to tailor processes extrapolated from different disciplines and approaches in order to present each partner with the outcomes they were aspiring for. Overall, this research was highly focussed on the processes pursued with each entity because how these processes unfolded was sometimes more significant than the empirical data that were being collected. This aligns with PAR as an approach in which the iterative and cyclic approach renders the process and its adaptability to a fluctuating context, a core outcome of the research endeavour. While the work had an ethnographic dimension, being overarched by a PAR approach, it was coupled with an action roadmap.

In the case of IHDO, whilst the engagements were done within a short timeframe, the main action phase was carried out by developing a cross-cultural engagement method that I replicated in both Ethiopia and Denmark and with some adaption in Lebanon, for comparison purposes, and by providing recommendations to each individual overall strategy. Also, working with LO, which, which is part of the IHDO network, the communication strategy emerged not only from their own expressed needs but also from staff members who decided to adopt the same approach of participatory workshops in other regions in Lebanon which were later on interrupted by the COVID-19 pandemic. Thus, these two examples demonstrated how certain methods could permeate such hierarchical institutions if ownership of the process was transferred to those involved. In the case of 4 all Causes, the manifesto was in itself an outcome of utmost significance particularly because it brought forward principles of democracy, social justice, and equitable participation and decision-making which was a model that could possibly be replicated with other organisations and/or groups who were inclined towards such principles. Furthermore, the resulting system which combined different mainstream and commonly used platforms such as WhatsApp, Facebook, and Instagram in addition to the mapping platform, was able to be responsive to fluctuating circumstances. The adaptability of this research to evolving circumstances and the

unexpected turn of events was a strength, noticeably by embracing the transition into a new ecosystem with the onset of the social movement despite the fact that it incurred major implications on design and engagement and the overall research agenda. The technical infrastructures that were documented served to highlight the limitations of Western platforms in intricate contexts. It equally demonstrated examples of adaptive mechanisms created in order to sustain a transnational public which is something not witnessed in any other context where such publics are usually short lived. This in itself implied that structural determinants and generative mechanisms were being targeted which can be translated into a possible and required change in policy.

A minor limitation of this work was that many of the conversations were held in colloquial Arabic. While I am a fluent native speaker of Arabic and I was trying to adequately translate what was being said in support with the professional transcriptionist, there will be instances in which some of the subliminal meaning behind a statement could not be captured in the translation to English. In order to remedy for that in the analysis, while assigning codes, I was also listening to the original recording in order to ensure that no significant meaning was lost in translation. Nevertheless, the main limitation of this work was the fact that no one from the public sector was involved at any stage of this research. This was primarily due to the nature of the political tension which emerged post the uprisings of October 2019, interrupting as such any possible attempt to reach out to the public sector. Bringing together grassroots organisations, community-based organisations, activists, and public servants was inappropriate especially given that these civic structures were in direct conflict with the prevailing system that they were aiming to dismantle. This opens the space for policy implications from this work. More than two years after the uprisings, it seems unrealistic to side-line the public sector and dialogue has to be initiated. Through the processes adopted in this research, such a future dialogue is possible with the public sector. This sector is now compelled to find a common ground with the parallel system which has been operating in the past two years as the latter has proven to attract more trust from the local and international community and offers promising alternatives for governance and welfare based on values of social justice.

As such, our role as researchers can be in creating such bridges especially by being outsiders and distanced from the friction between both ends. Therefore, the initiation of the social

innovation hub with the team from Daleel Tadamon (*Solidarity Directory*) meant that a significant contribution from this work was the start for a sustainable pathway to ensure such a coalition and dialogue occur while adopting participatory and innovative approaches and tools. It has now become clear to policy makers that policy changes have to inevitably occur especially with the upcoming parliamentary elections taking place in 2022. In light of the popularity of the opposition agenda, backed by members of the diaspora and the ongoing collapse of the country's structures, a pressure is exerted on them to consider reforms and more relational and democratised modalities based on which the public sector should be operating. Equally, mainstream NGOs have realised the power and public endorsement behind grassroots organisations and community-based organisations which are attracting more people due to their principles and by offering community members more decision-making power. Subsequently, they ought to provide communities with the ability to take control of their lives by finding themselves solutions to problems instead of importing solutions from abroad. Hence, the creation of such a hub reflects a contribution to the wider literature explored as it demonstrates an example of how PD and social innovation can be contextually scaled, it surmounts the limitation of the short timescales of research projects, and presents an opportunity to develop contextual and relevant tools.

Overall, this research carries with it empirical and methodological contributions. It is at the nexus of digital civics, public health, sociology, and politics. Being multi-disciplinary in nature, the research was challenging particularly in trying to reconcile between the values, theoretical underpinnings, and methods of each of these disciplines. However, it is an enriching endeavour, particularly that I contend that all of these disciplines can be and are interconnected. This is particularly valid if we refer back to Krieger's (2008) ecosocial theory based on which we need to examine outcomes and inequities from a historical, ecological, and political lens in order to address the existing social hierarchies and embodiments which strongly influence realities within a context. In addition, recognising technology and more specifically access to technology as a super determinant of health during these times and as the COVID-19 pandemic has further heightened, it is imperative to create localised and contextual opportunities for the design of technology. Nonetheless, it is important to build on the 'installed base' which ensures the sustainable uptake of such technologies and gives them the ability to address challenges which could not be addressed through conventional means.

The next years will carry more drastic changes to the political, social, economic, and environmental landscapes of Lebanon. I started this research endeavour facing a certain contextual reality and while many elements remained, I found myself later on dealing with an entirely different ecosystem. The future changes will probably entail different implications on practice and policy and might unveil new realities which may dictate other reflections and recommendations. On the long-term, in order to get closer to the aspired radical change of the embedded hegemonic structures, future research should investigate possible pathways and mechanisms to construct decentralised networked publics in different regions of the country, based on a common value system founded on the principles of social justice. Such publics will slowly but steadily be able to transform the existing *status quo* and will lead to an improved and relational model of service provision and welfare and more adequate multi-sectoral policies.

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APPENDIX A: Ethical Approvals



Sara Armouch
Institute of Health & Society

Faculty of Medical Sciences
Newcastle University
The Medical School
Framlington Place
Newcastle upon Tyne
NE2 4HH United Kingdom

FACULTY OF MEDICAL SCIENCES: ETHICS COMMITTEE

Dear Sara,

Title: The potential of innovation by youth-led groups within the scope of Sustainable Development Goals (Phase 1)

Application No: 1445/2779/2018

Start date to end date: 08/01/2018 to 31/12/2018

On behalf of the Faculty of Medical Sciences Ethics Committee, I am writing to confirm that the ethical aspects of your proposal have been considered and your study has been given ethical approval.

The approval is limited to this project: **1445/2779/2018**. If you wish for a further approval to extend this project, please submit a re-application to the FMS Ethics Committee and this will be considered.

During the course of your research project you may find it necessary to revise your protocol. Substantial changes in methodology, or changes that impact on the interface between the researcher and the participants must be considered by the FMS Ethics Committee, prior to implementation.*

At the close of your research project, please report any adverse events that have occurred and the actions that were taken to the FMS Ethics Committee.*

Best wishes,

Yours sincerely

A handwritten signature in black ink, appearing to read "K. Sutherland".

Kimberley Sutherland
On behalf of Faculty Ethics Committee

cc.
Professor Daniel Nettle, Chair of FMS Ethics Committee
Mrs Kay Howes, Research Manager

*Please refer to the latest guidance available on the internal Newcastle web-site.

tel: +44 (0) 191 208 8000
fax: +44 (0) 191 208 8821

www.ncl.ac.uk

The University of Newcastle upon Tyne (Trading as Newcastle University)



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2013

From: Policy & Information Team, Newcastle University noreply@limesurvey.org 
Subject: Ethics Form Completed for Project: 'Exploring youth civic engagement and self-organization practices in different regions.' KH135377
Date: 19 November 2018 at 12:06
To: s.armouch2@ncl.ac.uk

NP

Ref: 8790/2018

Thank you for submitting the ethical approval form for the project "Exploring youth civic engagement and self-organization practices in different regions." (Lead Investigator:Sara Armouch). Expected to run from 22/11/2018 to 30/09/2019.

Based on your answers the University Ethics Committee grants its approval for your project to progress. Please be aware that if you make any significant changes to your project then you should complete this form again as further review may be required. If you have any queries please contact res.policy@ncl.ac.uk

Best wishes

From: Policy & Information Team, Newcastle University noreply@limesurvey.org
Subject: Ethics Form Completed for Project: Engaging with youth civic engagement and self-organization practices in Lebanon KH135377
Date: 15 July 2019 at 16:02
To: s.armouch2@ncl.ac.uk

NP

Ref: 14071/2018

Thank you for submitting the ethical approval form for the project 'Engaging with youth civic engagement and self-organization practices in Lebanon' (Lead Investigator:Sara Armouch). Expected to run from 22/07/2019 to 30/09/2020.

Based on your answers the University Ethics Committee grants its approval for your project to progress. Please be aware that if you make any significant changes to your project then you should complete this form again as further review may be required. If you have any queries please contact res.policy@ncl.ac.uk

Best wishes

Policy & Information Team, Newcastle University Research Office

res.policy@ncl.ac.uk

From: Policy & Information Team, Newcastle University noreply@limesurvey.org
Subject: Ethics Form Completed for Project: Unfolding the socio-technical infrastructures underlying Lebanon's Revolution KH135377
Date: 19 December 2019 at 17:52
To: s.armouch2@ncl.ac.uk

NP

Ref: 18289/2019

Thank you for submitting the ethical approval form for the project 'Unfolding the socio-technical infrastructures underlying Lebanon's Revolution' (Lead Investigator:Sara Armouch). Expected to run from 26/12/2019 to 31/12/2020.

Based on your answers the University Ethics Committee grants its approval for your project to progress. Please be aware that if you make any significant changes to your project then you should complete this form again as further review may be required. If you have any queries please contact res.policy@ncl.ac.uk

Best wishes

Research, Policy, Intelligence and Ethics (formerly Policy & Information) Team, Newcastle University Research Office

res.policy@ncl.ac.uk

APPENDIX B: Samples of Consent Forms

Open Lab-Newcastle University

Information and Consent Form

Study Title: The potential of innovation by youth-led groups within the scope of Sustainable Development Goals (Phase 1)

We are asking you to participate in a research study which is part of a bigger research project for a doctoral thesis for Sarah Armouch. This phase of the research aims at exploring the space of youth civic engagement in Lebanon and how it links to the Sustainable Development Goals. We are aiming to explore your organization's current practices involving youth, challenges encountered and potential for innovation. This study is conducted by Open Lab at Newcastle University (in the UK). You have been approached as a result of previous scoping work that was conducted around youth organizations in Lebanon and for work you have been doing around issues pertaining to youth.

We are looking to obtain your consent for conducting an in-depth interview with you. The interview will be conducted by Sarah Armouch and will take up around 30 minutes of your time and will be conducted at a location of your choice.

If you agree, the interview will be audio-recorded and transcribed later on. If you do not wish for it to be recorded, written notetaking will take place instead.

Findings from this study will be disseminated through a thesis, publications, conferences, presentations, workshops and other relevant venues.

As someone involved in work around youth, innovation and youth civic engagement, we would like you to participate in this project and research study because we are interested in capturing your insights and concerns that can be built on for future research activities.

Benefits and risks

The aim of the overall project is to add to the body of knowledge around youth civic engagement and social innovation in Lebanon and the Middle East and North Africa region as a whole. Additionally, it aims at exploring potential spaces for digital innovation that could support practices led by and involving youth. There won't be a direct benefit to you as an individual. There are no expected risks associated with participation in this research project. If you feel any discomfort from any of the questions, you may choose not to answer them or stop participating in the research study.

Your responses will not affect your relationship with Open Lab or any other relevant stakeholder.

Confidentiality

If you grant your consent, no personal identifiers will be collected and findings will be labelled under a pseudonym or the name of your organization depending on your preference. The audio recordings will be transcribed and analyzed by the research team. If quotes are to be used from the transcripts, these will be anonymous. All recordings will be deleted from the recording devices and will be safely stored on a secure device.

Participant rights

Your participation is voluntary and refusal to participate will have no consequences at all on your relationship with Open Lab. If you choose to participate, you may discontinue participation at any time or skip certain questions you do not wish to answer. Your decision to withdraw will not have any consequences on you.

This study was approved by the Faculty of Medical Sciences Research Ethics Committee, part of Newcastle University's Research Ethics Committee. This committee contains members who are internal to the Faculty, as well as one external member. This study was reviewed by members of the committee, who must provide impartial advice and avoid significant conflicts of interests.

I, the undersigned, confirm that (please tick box as appropriate):

1.	You have heard and understood the information about the project, as provided in the consent form	Yes	No
2.	You have been given the opportunity to ask questions about the project and your participation.	Yes	No
3.	You voluntarily agree to participate in the project.	Yes	No
4.	You understand you can withdraw at any time without giving reasons and that you will not be penalized for withdrawing nor will you be questioned on why you have withdrawn.	Yes	No
5.	The procedures regarding confidentiality have been clearly explained (e.g. use of names, pseudonyms, anonymization of data, etc.) to you.	Yes	No
6.	Do you consent to us audio recording the interview?	Yes	No
7.	When I summarize the results of this study, I may wish to quote from the interview. Do you consent to being quoted anonymously?	Yes	No
8.	Do you consent for me to use the name of your organization while reporting certain findings?	Yes	No
9.	The use of the data in research, publications, sharing and archiving has been explained to you	Yes	No

Do you have any questions about the information above?

You will be provided with a copy of this consent form to keep with you.

Participant Consent:

I have read and understand the above information. I agree to participate in the research study.

Participant Name : _____

Participant Signature : _____

Date : _____

Contact Information

If you have any questions or concerns about this research study, please feel free to contact:

Sarah Armouch

Email: s.armouch2@ncl.ac.uk

Open Lab-Newcastle University
Information and Consent Form

Study Title: Unfolding the socio-technical infrastructures underlying Lebanon's 2019 Revolution

We are asking you to participate in a research study which is part of a bigger research project for a doctoral thesis for Sarah Armouch. This phase of the research aims at exploring the space of youth civic engagement, mobilisation, and self-organization in light of the latest uprisings and social movements that were triggered on October 17, 2019. We are aiming to develop a better understanding of the socio-technical practices that are taking place, challenges encountered and implications on the design of projects, initiatives and tools that would respond to current needs. This study is conducted by Open Lab at Newcastle University (in the UK). You have been approached based on scoping and observational work that were conducted to identify different organizations/structures and platforms channelled towards activities and projects that fall under the umbrella of the ongoing revolution.

We would like you to participate in this project and research study because we are interested in capturing your insights and concerns that can be built on for future research activities and projects. We are looking to obtain your consent for conducting a semi-structured interview with you. The interview will be conducted by Sarah Armouch and will take up around 45 minutes of your time and will take place at a location of your choice.

If you agree, the interview will be audio-recorded and transcribed later on. If you do not wish for it to be recorded, written notetaking will take place instead. Findings from this study will be disseminated through a thesis, publications, conferences, presentations, workshops, and other relevant venues.

Benefits and risks

The aim of the overall project is to add to the body of knowledge around youth civic engagement and social innovation across different configurations of youth civic engagement. Additionally, it aims at exploring potential spaces for digital innovation that could support practices led by and involving youth. There won't be a direct benefit to you as an individual. There are no expected risks associated with participation in this research project. If you feel any discomfort from any of the questions, you may choose not to answer them or stop participating in the research study.

Your responses will not affect your relationship with Open Lab or any other relevant stakeholder.

Confidentiality

If you grant your consent, no personal identifiers will be collected, and findings will be labelled under a pseudonym or the name of your organization depending on your preference. The audio recordings will be transcribed and analysed by the research team. If quotes are to be used from the transcripts, these will be anonymous. All recordings will be deleted from the recording devices and will be safely stored on a secure device.

All research data will be stored securely by Newcastle University and destroyed six months after completion of the lead researcher's PhD, in light of GDPR requirements.

Participant rights

Your participation is voluntary and refusal to participate will have no consequences at all on your relationship with Open Lab or any other stakeholder. If you choose to participate, you may discontinue participation at any time or skip certain questions you do not wish to answer. Your decision to withdraw will not have any consequences on you.

This study was approved by the Newcastle University's Research Ethics Committee.

I, the undersigned, confirm that (please tick box as appropriate):

1.	You have heard and understood the information about the project, as provided in the consent form	Yes	No
2.	You have been given the opportunity to ask questions about the project and your participation.	Yes	No
3.	You voluntarily agree to participate in the project.	Yes	No
4.	You understand you can withdraw at any time without giving reasons and that you will not be penalized for withdrawing nor will you be questioned on why you have withdrawn.	Yes	No
5.	The procedures regarding confidentiality have been clearly explained (e.g. use of names, pseudonyms, anonymization of data, etc.) to you.	Yes	No
6.	Do you consent to the audio recording of the interview?	Yes	No
7.	When I summarize the results of this study, I may wish to quote from the interview. Do you consent to being quoted anonymously?	Yes	No
8.	Do you consent for me to use the name of your organization while reporting certain findings?	Yes	No
9.	The use of the data in research, publications, sharing and archiving has been explained to you	Yes	No

Do you have any questions about the information above?

You will be provided with a copy of this consent form to keep with you.

Participant Consent:

I have read and understand the above information. I agree to participate in the research study.

Participant Name : _____

Participant Signature : _____

Date : _____

Contact Information

If you have any questions or concerns about this research study, please feel free to contact:

Sarah Armouch

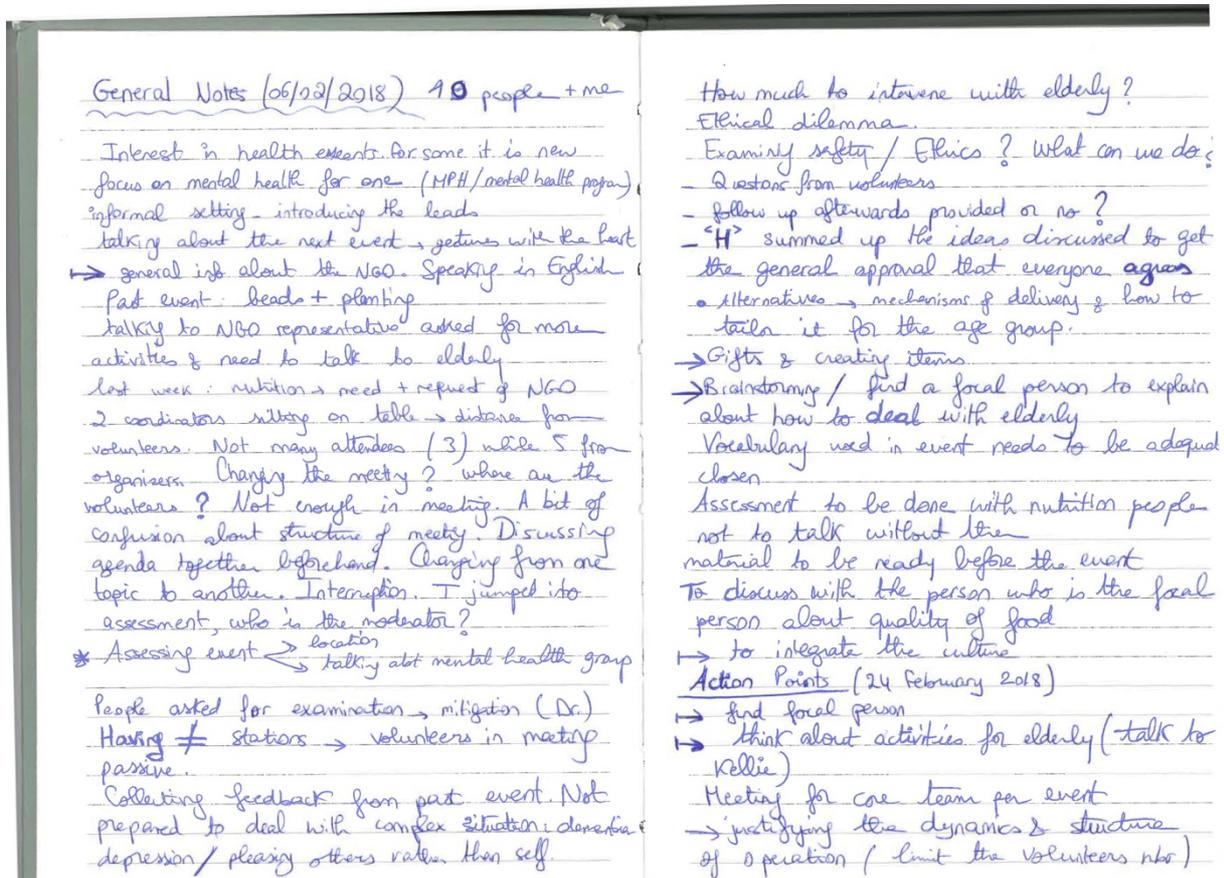
Email: s.armouch2@ncl.ac.uk

APPENDIX C: Interview Guide for Key Informants (exploration phase)

- 1) Can you please describe the mission, vision and main activities of your organisation or group and your role in that organisation/group?
- 2) What are the main values that your organisation or group work around?
- 3) In your opinion, what are current challenges youth are facing in Lebanon particularly and the MENA region generally?
- 4) How do you usually involve youth in your activities? How do these activities tackle the challenges you have mentioned earlier?
- 5) What is your understanding of youth civic engagement? How do you find youth civic engagement in Lebanon?
- 6) What are factors that influence youth civic engagement in Lebanon?
- 7) In your opinion, is there a difference between adults' civic engagement and youth civic engagement and how so?
- 8) There are several youth initiatives and self-organised youth groups in Lebanon, what is your stance on these groups?
- 9) Shifting towards digital innovation, what is your current use of digital tools in your line of work?
- 10) What are potential tools you envision that might be useful for your activities?
- 11) What are some drawbacks if any for using digital tools in such a context?

APPENDIX D: Sample of Field Notes (original and typed)

Original fieldnotes



Typed fieldnotes

Observation 1: 06/02/2018

Attendees: 10 people + me

General Meeting

Interest in health event. For some it is new to focus on mental health. There was an introduction of the coordinators: (Anonymised) and (Anonymised)

Talking about the next event with (Anonymised NGO)

General info about the NGO. The meeting was run in English. In a previous event, mentioning the plant activity during which volunteers assisted the elderly in planting some plants and decorate the jar. Talking to NGO representative who asked for more activities and the need to talk to elderly.

Last week: nutrition theme upon request of NGO. Two nutrition coordinators sitting on table (sign of certain hierarchy).

Not many attendees as volunteers (3), the rest are the core team.

Should the meeting be changed? Where are the volunteers? Not enough in meeting.

A bit of confusion around the agenda of the meeting. The topics are being changed. randomly and T keeps interrupting by jumping into assessment then back to next event. This makes me wonder who is the moderator of the meeting?

Talking about previous event, it was highlighted that elderly wanted medical examination mainly and there was mitigation by having a MD on board. There were different stations, but the place was tight and too noisy as pointed out by several of the people who were in the last event.

Collecting feedback about past event. The volunteers communicated that they weren't prepared to deal with elderly and especially those who weren't responsive or resistant.

There was an ethical dilemma raised "How much to intervene with elderly?" especially if thinking about mental health.

Volunteers had questions especially those who weren't in the past event. Does a follow up happen after each event?

I had to intervene and explain the ethical implications stressing the idea that we can't assess the elderly's mental health without ensuring follow up or referral and it is better to focus on entertainment activities to improve their general wellbeing.

(Anonymised) summed up all the points discussed and asked for general approval for next event. There was brainstorming for potential steps to make to be better prepared for the event. The idea of having an expert person delivering a session on how to deal with elderly and interact.

Suggestions:

- Choice of vocabulary to be used, not to be offensive
- Better preparation for this event considering that the previous one did not occur as it should and was last minute and the details of the venue and context weren't clear from the beginning (The people responsible for that event weren't present but we don't know if the core team talked to them afterwards about the shortcomings of the event).

Additional notes:

- There is a meeting for the core team per event. The dynamics and structure need to be understood.
- One particular volunteer keeps asking questions to understand how the event will take place.
- Volunteers need training for the events especially when different target groups.
- It seems there is a communication problem especially that many volunteers aren't responsive at all on WhatsApp.

I had to nudge one of the core board members to get things moving as she personally stated. There were delays in the fundraising team and the material preparation. The organizational dynamics within the group are unclear to me. There are 2 coordinators, but one seems to take the lead more than the other who plays more of an executive role. People are too busy with their work and responsibilities. Before the event with elderly, 2 were discussing one of the games (BINGO) and the volunteer responsible of it was concerned that it won't be interesting for the elderly and she will find herself doing nothing, so the coordinator told her that probably they should have discussed these issues in the preparation meeting. I met with the coordinators and discussed my ideas for the event, and we agreed on them.

APPENDIX E: Interview Guide for Staff members (IHDO national organisations)

- 1) Can you please describe the main activities of your organisation and your role in the organisation?
- 2) How do you usually involve youth in your activities?
- 3) What is your understanding of youth civic engagement? How do you find youth civic engagement in (country)?
- 4) In your opinion, what are current challenges youth volunteers are facing?
- 5) There are several youth initiatives and self-organised youth groups that are emerging in contrast to more organizational volunteering, what is your stance on these groups?
- 6) Shifting towards digital innovation, what is your current use of digital tools in your line of work?
- 7) What are potential tools you envision might be useful for your activities?
- 8) What are some drawbacks if any for using digital tools in such a context?
- 9) What recommendations do you have relating to youth mobilisation, volunteering model and innovation for the upcoming strategy of 2030?

APPENDIX F: Manifesto of 4 all Causes

VISION: Becoming a pioneer in facilitating the provision of quality primary health care services and implementing PH interventions across different regions of Lebanon.

MISSION: Engaging youth and professionals in the provision of effective and efficient PH interventions to marginalized communities.

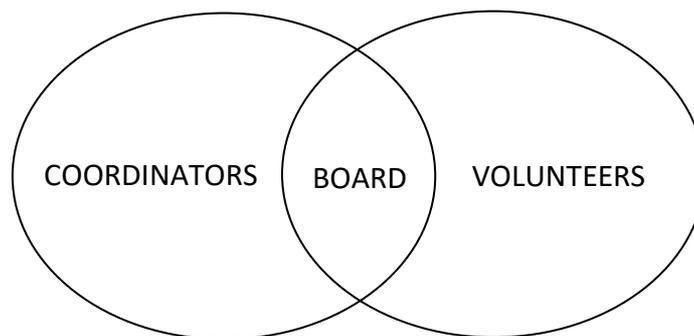
KEY WORDS: professional youth-led, CBOs needs-based partnerships, horizontal management, equity and public health

STAKEHOLDERS to approach:

- Donors
- Local NGOs (other than current ones)
- AUBMC care/heal programs

Others to keep in mind: Ministries, PHCs, Universities, Municipalities.

STRUCTURE



ACTIVITIES

1. Outreach to PHCs especially in the regions where 4 all Causes is operating and try to provide the missing services/train for local capacity.
 - **action:** liaise with ministry of public health to discuss further this idea.
2. Organise health promotion campaigns in public spaces (shopping malls, festivals, etc.)
 - **action:** map potential public spaces.

- **action:** contact the relevant focal people.
 - **action:** prepare the material to be disseminated.
3. Train local CBOs/local clubs on health promotion
- **action:** map which regions and the relevant local groups
 - **action:** prepare the training material

VOLUNTEERS

Age group: 18 and older

Background: does not matter but important to have those with health backgrounds.

Recruitment:

- Internal network of friends and acquaintances
- AUBMC care form for doctors; emails are sent for the department
- Following-up with existing volunteers
- Social Media & fundraisers to spread the word
- Soon: documentation and publishing articles and accomplishments

Communication modality: WhatsApp

Potential fears of volunteers to consider:

- To put effort in something that doesn't have an impact
- Lack of preparation before an event
- Not knowing the people in the team
- Not fitting in and letting the team down
- Inability to support after a certain time either due to burn out or circumstances

Food for Thought:

- Certification for volunteers
- Exploration of motivations to join 4 all Causes
- Creation of taskforces with different technical expertise: health material, PR and sponsorship, capacity-building
-

TRAINING

Priority for:

1. Health promotion delivery
2. Health material development
3. Writing grant proposals
4. Monitoring and Evaluation

TENSION POINTS

- Accountability: documenting referrals that took place and success stories
- Sustainability
- Visibility mechanisms
- Documentation of outcomes for advocacy purposes

APPENDIX G: Interview Guide for Activists (Lebanese social movement)

- 1) Tell me a little bit about yourself and your role in the current social movement
- 2) In your opinion what led to the uprisings of October 17, 2019
- 3) Why do you think WhatsApp was a tipping point? How do you explain that something like WhatsApp has become as essential as electricity, water, etc.
- 4) How do you perceive the role of digital technology in this revolution? (*probe: pros/cons*)
- 5) What is your opinion regarding the social and solidarity initiatives emerging in light of subsequent events in Lebanon?
- 6) What are the challenges facing such initiatives and projects?
- 7) How do you think such initiatives and platforms can be sustained?

APPENDIX H: Interview Guide for Diaspora Members

Demographic info

Age:

Country living in:

Years living abroad:

Occupation:

Interview

- Can you describe your everyday use of technology in your life?
 - probe on social media use, messaging apps, sharing economy technologies, crowdsourcing platforms, crowd-working platforms
- Can you describe your connection to Lebanon?
 - family members living there?
 - visit frequently?
 - Connections with other Lebanese diaspora communities?
 - Connections to Lebanese charities and organizations?
 - How do you maintain these connections?
- During the early stages of the Lebanese Revolution, did you follow the revolution activities closely?
 - How? What were your sources?
 - Why?
 - Do you usually follow Lebanese news?
 - How?
- Do you consider yourself actively involved in the Lebanese revolution?
 - How?
 - Has your activity changed over time? --> Covid-19, economic crisis, social media policing

Please describe your involvement:

--> organization: describe activities, digital and non-digital, tools (probe on adaptation of existing tools), challenges (digital challenges)

--> **Individual**: Do you know/use any specific technologies to support the Lebanese revolution, the Lebanese people (in Lebanon and outside of Lebanon), organizations supporting Lebanese during the economic crash/Covid-19?

-probe on social media use, messaging apps, sharing economy technologies, crowdsourcing platforms, crowd working platforms, money transfer technologies and structures

-Can you describe how you found out about them?

-Can you describe how you have used each of them?

-Are you part of any virtual network of Lebanese diaspora that is supporting the Lebanese revolution and/or organizations supporting Lebanese during the economic crash?

--> Challenge specific questions:

-How has the deterioration of infrastructures in Lebanon impacted your ability to support as diaspora? (electivity, WIFI, banking sector etc).

-How are you working to overcome those challenges?

-probe on the interplay between the digital, social and organizational

-Individual: did you experience any trouble using certain technologies to support the Lebanese revolution? Can you describe the difficulties?

-Probe for:

-UX

-Political

-security

-Interaction with people on the ground

-How did you overcome the barriers?

-What do you consider is the way forward from a digital and non-digital perspective to support the revolution as diaspora?

-probe on possible future adaptations of digital tools

-if you had the chance or opportunity to be involved in a digital endeavour to support Lebanon, what do you think that could be?