Experimenting the Healthy City

Unpacking urban health experiments

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Experimenting The Healthy City
Unpacking urban health experiments

Experimenteren met de gezonde stad
Stedelijke gezondheidsexperimenten ontrafeld

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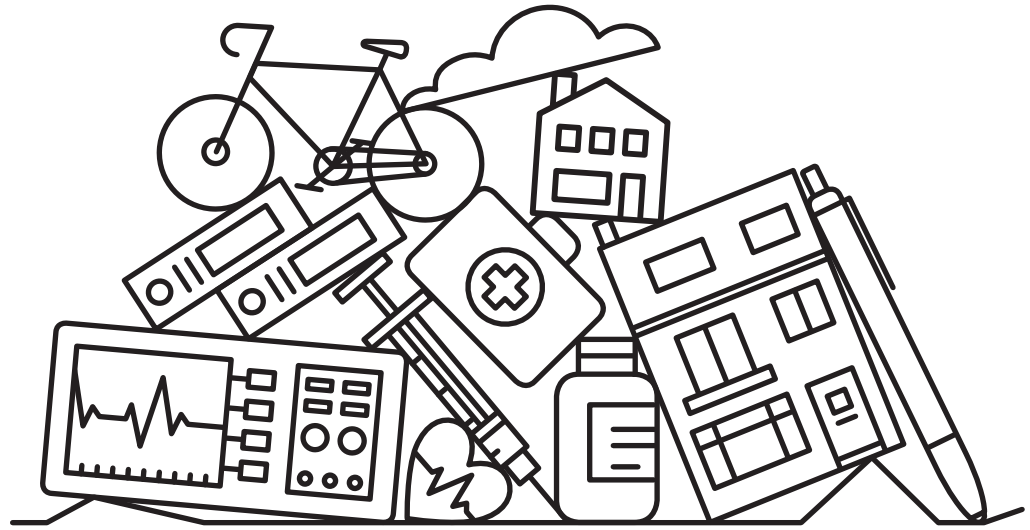

Introduction

"With the majority of the world's population residing in urban areas for the first time in human history, cities are emerging as key sites of social experimentation and problem solving"
(Shelton, Zook and Wiig 2014)

The trope that the majority of the world's population now lives in cities increasingly justifies the urban as a site of attention. Cities have become home to urgent environmental, economic, social demographic, and health challenges. Paradoxically, urbanism is seen as causing these challenges but at the same time the city is appointed as the site of their potential solution (Davis 2010: 30). Urbanization can negatively impact peoples' lives. For example, living in close proximity poses challenges for the physical environment, such as combining space for leisure activities and housing. It also gives rise to social upheaval or the fast spread of dangerous viruses (Buhaug and Urdal 2013). At the same time the city is viewed as a creative breeding ground for dealing with challenges as they allow people to come together in start-ups and creative firms, knowledge institutes or bottom-up organizations in search for innovative solutions (Evans et al. 2016; Garcia et al. 2015; Haupt et al. 2020; Karvonen 2018; Marvin et al. 2018).

Since the early 1970s, national state power has increasingly been placed to the city-region (Brenner 2004) as the right site for approaching certain societal problems. Because of the proximity of the city to its residents it is presumed that local governments know about their citizens' needs and can implement necessary initiatives, thereby directly influencing lives (Putters 2018). Moreover, the city is seen as the place in which civic participation and 'the community' reveal solidarity and sociality (Rose 1999), where community participation and equity are located and where partnerships of citizens, local governments and civil society can find hands-on solutions for approaching societal problems.

The academic community and policymakers alike, increasingly foreground the innovative potential of the urban as a site for dealing with a wide variety of challenges. Hereby, the city is turned into a change agent for innovation and transformation (Barber 2013; Hajer in Evans et. al 2016). It serves as a place-based locus of solutionism and experimentalism, as an energetic space of hope and a place to govern grand challenges and radical uncertainty in the context of global problems, ranging from the climate and migration crises to social inequality and the restructuring of welfare states (Anand and Seetharam 2019; Davis 2010; de Koning forthcoming; Evans et al. 2016; Marvin et al. 2018).

This dissertation is about urban experimentation, with a focus on health as an important grand challenge. Local health experiments have increasingly become a form of urban governance, resulting in a growing focus on the Healthy City. Urban health experiments involve navigating different values and interests, and ultimately deal with distributing resources and questions of

how to construct a healthy – and, as implied, good – life in cities. The turn towards the city as a site of experimentation including its political dimension warrants attention (Hajer in Evans et al. 2016; van Houdt and Schinkel 2019). So far, it has not gained the empirical attention it deserves. As a result, there is a lack of understanding of how urban experimentation is reshaping new socio-political urban realities within the city (Bulkeley and Castan Brotó 2013; Evans and Karvonen 2014; Evans et al. 2016). It is therefore important that the political understandings of experimenting[1] the Healthy City receive more attention. In this dissertation, I focus on these understandings by opening up *urban health experiments*.

The Healthy City

One of the challenges that is approached experimentally on the city level, is health. The Healthy City features in many policy agendas, both nationally and internationally (Ashton and Thurston 2017; de Leeuw 2017; Horstman and Knibbe 2022; Rose and Fitzgerald 2022; WHO 2015)[2]. This agenda includes a broad range of issues such as the increasing gap between people's health between neighbourhoods, the influence of the built environment on health and the effects of climate change such as heat stress and pandemic threats.

What the Healthy City is, is subject of interpretation. Often there is a tendency to make the Healthy City measurable and governable. In this case, the Healthy City is attributed with concrete health parameters[3] and its policy and practices take on a rather prescriptive and static character. These Healthy City parameters suggest that it is a straightforward concept which can be translated into practical tools for designing the Healthy City. At the basis of this Healthy City discourse is the notion of *integrality* (Frissen 2023), a notion that risks putting forward a straightforward idea of health, designed from a single perspective of manufacturability.

[1] I deliberately use 'experimenting' the Healthy City as a verb as it highlights how urban health experiments are made up of practices of urban actors (policymakers, professionals, citizens) that bring the Healthy City into being.

[2] Although urban health and experimentation are presented as a new approach to urban health within the Healthy City discourse, cities have long faced health challenges that were approached experimentally. With increased urbanization came experiments in governing health, as cities sought to improve living conditions and combat diseases such as the black plague and tuberculosis as early as the 18th century. Innovations like sewer systems, improved hygiene, water pipes, and better working conditions transformed urban life, leading to a reduction in infectious diseases and poverty and the governance of urban life (Horstman et al. 2022; Osborne 1996; Sennet 2019).

[3] An example of these parameters are the ones described by Hancock and Duhl (1988) which are:

1. A clean, safe, high quality physical environment (including housing quality).
2. An ecosystem which is stable now and sustainable in the long-term.
3. A strong, mutually supportive and non-exploitive community.
4. A high degree of public participation in and control over the decisions affecting one's life, health, and well-being.
5. The meeting of basic needs (food, water, shelter, income, safety, and work) for all the city's people.
6. Access to a wide variety of experiences and resources with the possibility of multiple contracts, interactions, and communication.
7. A diverse, vital, and innovative city economy.
8. Encouragement of connectedness with the past, with cultural and biological heritage, and with other groups and individuals.
9. A city form that is compatible with and enhances the above parameters and behaviors.
10. An optimum level of appropriate public-health and sick-care services to all.
11. High health status (both high positive health status and low disease status).

This masks underlying political questions. For example, although a high degree of public participation in, and control over, decisions affecting one's life, health, and well-being seems desirable, the question is which publics are invited to participate and how, and moreover how health and wellbeing are defined and by whom.

The political nature of the Healthy City is shown by Horstman and Knibbe (2020), who describe health in the city as the "wide range of *meanings* in everyday *practices* of health, resilience, security and participation" (p 15). Ideally, this broad approach to the Healthy City ensures the inclusion of different meanings and forms of knowledge (informal, experience-based and institutional) of different actors who all have a stake in the city (Horstman and Knibbe 2022). An example of how meanings of a Healthy City may differ in practice that these authors give, is the fast-food outlet. Fast-food is generally considered to be unhealthy by policymakers and professionals, whereas the local community can appreciate a local (fast-)food outlet as an important social meeting place in an area that is otherwise depleted of other kinds of public meeting spaces. Such a practice-based approach to the Healthy City recognizes the importance of the meaning residents attach to places or practices for their health and wellbeing. This example highlights how health ideals differ among different groups. Standards and indicators do not always recognise these ideals, and it is therefore a question of whose healthy ideals prevail when policy is made on the basis of these indicators.

I follow this political practice-based approach to the Healthy City to draw out what the concept does in practice as it is not self-explanatory and – crucially – raises political questions. Health and wellbeing in The Healthy City contain different underlying values and interests and they do not mean the same to everyone. Moreover, Healthy City practices do not benefit everyone in the same way. Because of this political complexity, there can be no blueprint to the Healthy City. Seemingly recognizing this, cities turn to experimentation to shape the Healthy City. This is why I delve deeper into the Healthy City-as-experiment.

The Healthy City–as–experiment

Urban experimentation signals ideas of creativity and innovation, transforming urban issues from grand challenges and policy documents into concrete, actionable practices to be taken up by a variety of urban actors in specific places. In this way it emphasizes learning in real-world settings, the collaboration of diverse actors to create synergistic solutions and the embedding of experimentation into institutions (Evans et al. 2016; Nyström et al. 2014).

Public health experiments in the urban context focus attention on 'community approaches' aiming to stimulate healthy initiatives 'bottom-up', emerging from local capacities, situations and concerns. Interesting examples involve experiments focused on the quality of urban air. In this context, Zandbergen (2017) describes how a group of engaged citizens together with private parties, address the problem of poor urban air quality by co-creating an 'egg' that citizens themselves can use to measure air quality. Another example is given by Kolks (forthcoming) who analyses urbanites who, working together with the municipality and a knowledge

institute, scrape and process particular matter (air pollution) into tableware, creatively called *Smogware*[4]. Here, actors turn a health issue into a public concern with the aim to change urban policy. By experimenting with health in this way these experiments bring the Healthy City into being.

Generally, authors studying urban experiments have researched the effectiveness of urban experiments (Ballon et al. 2018; Veeckman and Temmerman 2021), identified success factors, barriers, and underlying mechanisms (Nevens et al. 2013) and classified urban experiments into typologies (Almirall et al. 2012; Voytenko et al. 2016). In this line, various authors classified experiments by process or output, revealing user characteristics (Leminen et al. 2015; Nyström et al. 2014; Schuurman et al. 2015) and their participatory potential (Bulkeley et al. 2018; Dekker et al. 2017; Puerari et al. 2018; Steen and van Bueren 2017). Other studies analyse the innovation and learning potential, inclusion, co-production, roles, and horizontal relationships within urban experiments (Bulkeley et al. 2018; 2019; Bulkeley and Castan Brotó 2013; Dekker et al. 2017; Engels et al. 2018; Evans et al. 2016; Karvonen and van Heur 2014; Marvin et al. 2018; Menny et al. 2018; Puerari et al. 2018; Steen and van Bueren 2017).

In response to the above studies, an emerging critical scholarship argues that urban experiments are not just a means to an end (innovation, engagement, improvement etc.), but can be considered an interesting governance phenomenon in their own right. Critical scholars have studied urban experiments in relation to the democratic aspirations of experiments, revealing how its publics are generated by, and hence prefigure the set-up instead of simply serving as a democratic public consultation, and moreover how they often lack accountability mechanisms (Evans et al. 2016; Engels et al., 2018). Others have examined underlying logics of prototyping as a self-referential practice, highlighting how experimentation leads to the continuous suspension of outcomes and therefore constant justification for the experimental practices in and of itself (Halpern 2013). Whereas others have studied their transformative political power as instruments in shaping governance processes of urban transformation (Bulkeley and Castan Brotó 2013; Bulkeley et al. 2018; Evans 2016; Karvonen and van Heur 2014; Tironi 2019). Common to these approaches is that they show that urban experiments are not a neutral mode of governance. This dissertation builds on this critical scholarship.

I take the term ‘urban experiment' to mean the purposeful sites, practices and interventions that demonstrate a will to learn, to innovate, to improve and, eventually, to govern the urban environment or urban life in new ways (Bulkeley and Castan Brotó 2013). Importantly, in this dissertation, I am specifically interested in the (urban health) experiment as a governing practice. In this context, knowledge production is still a part of urban experimentation, but experimentation is more likely to serve to rearrange responsibilities and power relations. This goes beyond current understandings of experimentation. There is for example the more classical understanding of experimentation as the authorized way of revealing an unknown 'truth': a truth, moreover, that can be applied as a blueprint in different contexts across the world. Another understanding is that of the experiment as 'science in the wild' (Callon et al. 2011).

[4]Smogware is called ‘Servies’ in Dutch: https://smogware.org/.

This is exemplified, for example, by the early twentieth-century Chicago School of sociology who treated the city as both a laboratory and a field site, seeking to combine the scientific authority of both (Gieryn, 2006). For them, the city served as a controlled environment for scientific observation and manipulation. At the same time, it was a field site with its unique local characteristics. These notions involve different epistemic assumptions but collectively represent the experiment as an epistemic practice, a way of acting in uncertainty through experimentation and collective learning (Callon et al. 2011), in which experimentation is an ongoing process. Although these notions can still be found in many urban experiments today, the difference is that current experiments increasingly are used as a new way of governing the city (Bulkeley and Castan Brotó 2013; Evans 2016; Evans et al. 2016; Karvonen and van Heur 2016; Marvin et al. 2018; Voytenko et al. 2016).

The experiment as a new urban governance arrangement

Following from the above, I take up urban experiments in the Healthy City as a way of *governing* the urban (Eneqvist and Karvonen 2021). This form of governance is often coined 'experimentalist governance' (Hajer in Evans et al. 2016; Sabel and Zeitlin 2012), 'experimental urbanism' (Evans et al. 2016), or 'test-bed urbanism' (Halpern et al. 2013). Experimentation (with urban health) materializes in different forms such as urban (living) labs, test beds, prototypes, workshops, and scenario building. These places are framed as a ‘free place’ for policymakers and citizens to operate outside of the regular practices and regulatory frameworks. In doing so, they create an immanent timeframe: by suspending the history of previous policies and strategies they simultaneously appeal to futures that will be the improved version of the present in a logic of optimization (Schinkel 2023) while suspending outcomes and thereby continuously justifying yet a new experiment (Halpern et al. 2013).

Looking at urban experiments in this way aligns with a broader trend in governance theory called New Public Governance (NPG). This paradigm of governance was developed in the context of public policy implementation and public service delivery. It introduces novel steering mechanisms in response to growing complexity and uncertainty (Osborne 2010; Torfing et al. 2021), especially regarding so-called intractable or wicked problems (Rittel and Webber 1973). NPG aims to foster innovative solutions and disrupt conventional approaches, for example by collectively developing new norms, engaging in experimentation, and organizing reflection on processes, outputs, or outcomes. As an alternative to New Public Management, it eschews straightforward solutions, pre-determined goals, and fixed performance indicators and results in less rigid governance mechanisms.

Certain elements that appear in NPG are described more in depth in other bodies of literature. The notion of experimental governance is however of particular relevance here. Because of increasing complexity and uncertainty, the challenges of a world where specific policy objectives and the means to achieve them cannot be predetermined but must instead be uncovered through the process of problem-solving, in which solutions are incrementally designed and practiced. In the context of urban health experiments, experimental governance, as a subset

of governance theory, involves a process of learning by – and while – doing and employing unique mechanisms for accountability, monitoring, and the enforcement of compliance (Sabel and Zeitlin 2012).

Moreover, experimentation is not only deployed as a transformative practice, but also as a democratic one (Bulkeley and Castan Brotó 2013). Participatory governance, as another subset of governance theory, specifically emphasizes democratic participation by deepening citizen involvement in the governmental process (Fischer 2012). In the context of urban health experiments this means that urban residents are invited into the experimentation process. Participation, inclusivity, and horizontal networks are seen as emancipatory for citizens and communities and draws on discourses of active citizenship, in which citizens are encouraged - and expected - to take control and responsibility over their lives and their living environment (see for a critique Duyvendak and Tonkens 2018; Oldenhof and Linthorst 2022). This requires the active engagement of communities and citizens in policymaking and implementation, with governmental actors that act as partners or facilitators appealing to existing community vitality and participation (Vollebergh et al. 2021).

All of these governance approaches involve a shift from traditional top-down approaches to more horizontally structured processes of shared or interactive power, facilitating collective governance by diverse actors. They encourage public and private sector collaboration in networks or partnerships with diverse objectives, emphasizing public participation and creating public value. As a result, more discretion is granted to various stakeholders, users, and citizens, incorporating local resources into the governance process (Osborne 2010; Swyngedouw 2005; Torfing et al. 2021).

Like these new forms of governance and as a consequence of the different aspects related to governance (horizontal collaboration, democratic participation and setting objectives 'on the go'), urban experiments are imbued with new political dimensions. It is these political stakes within urban health experimentation that I will turn to next.

The politics of urban experimentation

The Healthy City discourse seeks to enhance participatory and inclusive Healthy City practices, often framing urban experimentation as a straightforward, democratic, and emancipatory practice. The literature has so far been mainly discussed in terms of high expectations and promissory potential, taking up urban experimentation as a wholesome enterprise in and of itself. As a consequence, there is a risk of reifying the terminology rather than analysing the normative aspects underlying the urban experiment and the ways experimentation is enacted in practice. Hereby studies fail to analyse experimentation as a question of governance, ignoring issues of power, values and interests in decision-making, power inequalities and in- and exclusions of (McFarlane 2011). Thus, the political normative choices and assumptions that underpin them remain implicit but have real consequences for urban governance.
Looking deeper at urban health experimentation reveals a complex assemblage. There can be

a variety of framings, for example of the issues that are put on the agenda, which questions are asked and what forms of experimentation are needed. These political choices shape new socio-political urban realities. This resonates with McFarlane's (2011) argument for focusing more attention on the politics of experimental learning which is:

> *"a process involving particular constituencies and discursive constructions, entails a range of inclusions and exclusions of people and epistemologies, and produces a means of going on through a set of guidelines, tactics and opportunities. As a process and outcome, learning is actively involved in changing and bringing into being particular assemblages of people-sources-knowledges. It is more than just a set of*
> *mundane practical questions, but is central to political strategies that seek to consolidate, challenge, alter and name new urban worlds"* (McFarlane, 2011: 361).

This quote accurately addresses what the stakes are within urban health experiments as a governance practice. In line with debates on the right to the city (Harvey 2005), the question is whether and how urban health experiments reveal particular in- and exclusions, and which people, knowledges and resources will become part and parcel of that new urban reality. It is therefore crucial to consider the structures and processes that constitute relations of authority and to foreground power and the interests that influence policy- and decision-making within the city (Ansell and Torfing 2014; 2021; Osborne 2010; Pierre 2005; Raco and Freire-Trigo 2019).

For this, I take inspiration from political scientist Stone (2012; 2021) who argues that classifications and categories frame reality instead of reflecting it. For example, being able to count, first needs a decision about what counts. Thinking about the fast-food example by Horstman and Knibbe mentioned earlier in this introduction, reveals this process. In this example, a focus on counting only 'healthy' food outlets ensures that less 'healthy' places such as fast-food outlets do not count even though such a place can function as the necessary glue that holds together a community. In the same vein, Dehue (2023) argues that seeing knowledge as merely reflecting an objective truth out there, obscures the work that is being done to produce that knowledge. I argue that the same lens can be applied to urban experimentation. What these experiments are focused on and the questions they address are not a reflection of an urgent urban condition but a reflection of the voices that are being heard, the values that are prioritized and the knowledge that is regarded as valid. This means that the ideal of the Healthy City is not clearcut but multiple, and even that conflicting interpretations and priorities exist simultaneously and are negotiated by actors in practices on the ground floor (Greenhalgh et al. 2023; Oldenhof et al. 2022).

In this dissertation, I aim to incorporate these political components of experimenting the Healthy City, thereby answering recent calls for a more profound comprehension of the political dynamics at play in public health and health policy (Ashton and Thurston 2017: 237). Hereto, I share with Horstman and Knibbe (2022) a commitment of highlighting the micro-politics of experimenting the Healthy City. This means that I take up the notion of urban politics informally, as a reference to the social relations between groups of people and different interests and values. This is politics with a small p, that is, the micropolitics of daily practices in which

people are not especially aware of their power, as opposed to the formal urban politics that deal with the political system, official government, and representation. These micro-politics (Gilliom 2001) have so far received too little attention in urban governance literature.

Research aim and questions

> *"The critic is not the one who debunks, but the one who assembles. The critic is not the one who lifts the rug from under the feet of naïf believers, but the one who offers participants arenas in which to gather."* (Latour 2004, p 246)

This dissertation is aimed at creating an arena to think critically about health experiments in the city, taking seriously its consequences. I illuminate the processes and practices that constitute them. By critically unpacking urban health experiments as a mode of governance, I analyse how these governance arrangements are configured and enacted, illuminating the political choices and assumptions involved in constructing, practicing, and governing the ideal of the Healthy City. To analyse this political component, it is important to study what urban health experiments do in practice. In short, questions regarding whose voices are being heard, and which and whose knowledge, views and values are being prioritized are empirical questions that warrant crucial scrutiny. These political questions are central to the different chapters in this dissertation. This means analysing what kind of arrangements and politics the urban experiments within this dissertation produce.

This results in the following research question: *How are urban health experiments constructed as a governance practice and what are the consequences thereof?*

This aim is translated into three sub-questions:

1. *Who gets a say in urban health experiments and what does this mean for processes of in- and exclusion of voices, knowledges, and values?*

This sub-question aims to reveal the micro-politics of experimentation in order to give insight in the processes and mechanisms that lead to the inclusion and exclusion of people, knowledges, and values.

2. *How do urban health experiments reconfigure responsibilities between the (local) government and citizens?*

Urban health experiments bring together citizens and local governments with the aim to solve urban issues differently. In this way they reconfigure responsibilities between parties. This question seeks to understand how this reconfiguration takes place and creates new socio-political urban realities.

3. *How does the notion of 'free' experimentation relate to the institutional context in which urban health experiments take place?*

Urban health experiments aim to disrupt or go against regular accountability practices and procedures of the system. This question seeks to understand if and how urban health experiments provide a free space to do so in the context of existing policies and practices, what this affords, and how this context is used strategically.

Research trajectory

My research commenced in 2018 in the city of Rotterdam, a city in which urban experimentalism is very present. The urban labs, the resilience program and the algorithmic governance case studies took place here, while the COVID-19 case study took place in an anonymized urban area. I took this specific city as a focal point because Rotterdam is often described as a (policy) laboratory (Noordegraaf 2008; Notten 2008; van Houdt and Schinkel 2019). Moreover, Rotterdam prides itself for its experimental attitude (Rotterdam Municipality, 2014: 4) characterizing itself as "*The laboratory of the Netherlands*" in which the city aims to "*innovate and renew together with civil society, knowledge institutes, urban entrepreneurs and citizens of Rotterdam*" (Rotterdam Municipality, 2014: 4). Besides praising itself for being innovative, other cities take inspiration from Rotterdam for their urban policies (Grotestedenbeleid). Currently, the biggest urban program in the Netherlands comes from Rotterdam, the NPRZ[5], and serves as inspiration for a new wave of neighbourhood approaches (Custers 2022). For example, the new National Program Liveability and Safety explicitly follows NPRZ as a good practice of innovative policy (Spijker and Tops 2021). Internationally, Rotterdam is recognized as an experimental city and embedded in experimental networks such as the Resilient City Network of the Rockefeller Foundation. Developments like these make Rotterdam the place *par excellence* for a study into urban health experiments.

Additionally, Healthy City experiments need to be placed in the context of the current restructuring of the welfare state, as it fits Big Society's shift in responsibilities, away from (local) governments onto civil society and citizens. The Dutch case is interesting because in the Netherlands, as of 2015, tasks and responsibilities of (social) care and wellbeing within the social domain are decentralized from the national to the local government. Additionally, these tasks are performed with fewer financial resources. Hereto, municipalities require a transformation of arrangements of (social) care and support (Putters 2018). Dutch local governments are still finding out how to handle these new responsibilities, together with civil society actors, with self-reliant, resilient, and active citizens and their informal social support networks (Bredewold et al. 2018; Verhoeven and Tonkens 2013; Oldenhof and Linthorst 2022).

In 2018, I started my research by engaging in a multi-sited ethnography (Hannerz 2003) to explore the concept of the Healthy City, because instead of one delineated place where health is 'done', the Healthy City is fluid and takes form through many different programs and policies. This approach involved following urban health experiments, i.e., 'hanging out', observing and analysing diverse urban health projects, encompassing different discourses, policies, and

[5]NPRZ stand s for Nieuw Pact Rotterdam Zuid. This program is the only significant large-scale neighbourhood approach in the Netherlands that focuses on the improvement of vulnerable neighbourhoods and its residents, after the last Metropolitan Policy was abolished under cabinet Rutte-I at the end of 2011 (Custers 2022).

programs. Initially, my focus was primarily on urban labs as a means of transformative urban governance. As my research progressed however, I discovered that the experimental form had a broader scope and often overlapped with other initiatives. Urban experiments extend beyond the urban lab and seep into programs such as urban resilience, smart city initiatives, and big data workshops.

To gain empirical insights, I studied four urban health experiments, all termed as laboratories in one way or another: (1) urban labs that aim to make the city more liveable clearly reveal the laboratory terminology; (2) the resilient neighbourhood was coined a living lab; (3) the 'workshop' that developed algorithmic governance for youth care similarly refers to a laboratory set-up and terminology; and (4) likewise COVID-19 decision-making was often referred to as a living laboratory for public health crises. Although different in form, their common objective was to experimentally build a resilient and Healthy City. I examined them to understand the processes of construction and practices of urban health experiments that bring into being the ideal of a Healthy City, and to what consequences.

First, I immersed myself in the world of so-called urban labs, experiments with(in) the urban landscape. I did so by 'being there'. In a so-called interface ethnography (Ortner 2010), I observed specific gatherings in which urban labs and city-makers interact with the public, i.e., public consultations sessions and workshops. In addition, I interviewed urban lab initiators. Moreover, I followed urban actors – often referring to themselves as city-makers – that were committed to finding creative and practical solutions for urban problems through urban experimentation who welcomed me into their practices. Interestingly, during one of the very first meetings on urban experimentation that I observed, a key-actor expressed an interesting utterance during the presentation of a critical analysis regarding the (lack of) inclusivity of different urban labs and other city-making practices. They argued: "*I do not want to look at what is going wrong, I only want to draw attention towards what is going right*". (Fieldnotes February 27th, 2018). I remember that at that moment I felt an incredible unease, a kind of disconcertment, as Helen Verran describes it (2001). This uneasiness turned out rather productive as it steered my attention. My research shifted from contemplating the design, implementation, and execution of urban experiments - in order to learn and scale up for example - towards examining how these experiments shape and enact new forms of urban governance and corresponding socio-political realities.

Subsequently, I studied one specific urban living lab in-depth. In this case, an entire neighbourhood in the city of Rotterdam and its community was appointed to become the cities' first Resilient district by implementing a Resilient City program. Throughout 2018 and 2019, I studied this program ethnographically by being present in the neighbourhood to varying degrees of intensity. Here, I observed workshops, presentations, conferences, neighbourhood tours and a two-day international summit on urban resilience. Moreover, I conducted in-depth interviews with the key-actors involved in this program.

The third case study revolved around a group of actors who experimented in a 'workshop' setting with (big) data and algorithmic governance which combined a discourse of prevention with a smart city discourse. These actors were involved in the co- design of an algorithmic tool in order to predict who would become users of complex youth care services. I first became acquainted with this group of designers, philosophers, youth care professionals and municipal policy-advisors at the end of 2018. I conducted participatory observations and interviews with this group until the beginning of 2023. In this research, I adopted the role of action researcher. I was more clearly present to the field actors, as I reflected with the actors after every meeting and asked them many questions about their practice. Moreover, I assisted in conducting 'client-journeys' which aimed to bring in the user perspective of urban youth and their families into the data experiment.

I could not have anticipated the case study that completed my PhD research. In March 2020, right in the middle of my PhD trajectory, the world got confronted with COVID-19. For many of my fellow researchers this was a bitter pill, as from that moment on they had to do their research online. Luckily, I was able to turn this unfortunate situation into a unique research opportunity. In March 2020, after the second week of the COVID-19 outbreak in the Netherlands, I was able to start my most intensive fieldwork by shadowing the director of Public Health. I was able to spend my days within the walls of the Public Health departments and the safety authority to observe meetings and interview the actors working on managing the pandemic both informally and formally – studying this 'natural experiment' from within. In doing so, I obtained access behind closed doors, and I could observe meetings that were closed off from the public. Because the pandemic presented the world with an unprecedented situation and Public Health policy was not (yet) adequately equipped to handle this, the approach – through crisis-management and scenario-thinking – was essentially experimental. This made the situation relevant to include in my study of urban health experiments.

Outline of the chapters

Chapter 2 gives a critical account of the **Laboratory City** by examining urban lab projects from the perspective of the urban imaginary, a term that reveals how lab-makers 'do' local initiatives for improving the city through what we have called imaginative work. This analysis identified three practices of imaginative work that are constitutive of the urban lab: branding, dreaming, and assimilating. The chapter focuses on the urban lab as a process of imaginative work considers both practices of city-making, as well as the actors involved. This processual take provides a more nuanced and less romantic understanding of the urban lab, instead of a participatory space by default. Imaginative work practices reveal how the process of constructing and practicing the urban lab has unintended exclusionary effects.

Chapter 3 addresses urban challenges faced in the **Experimental City**. The primary governance challenge of Urban Living Labs is to effectively use their liminal in-between position to create liveable cities. However, liminality is claimed to generate risks in terms of legitimate decision-making and accountability. This chapter zooms in on key value trade-offs that are made within Urban Living Lab practices and identifies five trade-offs: (1) institutional collabo-

ration versus autonomous activism, (2) professional versus lay participation and values, (3) the social versus the material, (4) place bound experimentation versus placeless learning and (5) accountability and capital value versus societal value. This chapter illuminates the difficulty of institutional contexts for free experimentation. It reveals that calls for new institutional rules for city-making to deal with these trade-offs can potentially address the lack of legitimacy in decision-making yet may also hamper the open-ended nature of experimentation by introducing bureaucratic procedures and co-opting labs into implementing formal policy.

Chapter 4 describes a case study of the **Resilient City**, a burgeoning new discourse for dealing with future shocks, crises and transition in urban governance. Using a governmentality lens, this chapter analyses resilience as a 'matter of empirics'. Based on a multi-sited ethnography of resilience within the city of Rotterdam that joined the 100-RC initiative pioneered by the Rockefeller Foundation, five governing techniques are identified: (1) anticipating, (2) transcending, (3) laboratising, (4) monitoring and (5) responsibilizing. The analysis illuminates how the discourse of resilience can be place between a hopeful progressive politics and cruel optimism, as it depoliticizes (urban) issues and can have cruel effects.

Chapter 5 gives an account of the **Algorithmic City** in a case study regarding predictive analytics in the urban context. This particular experiment revolved around co-designing an algorithm that would signal future use of (complex) youth care. By conducting 'costumer journeys' with youth care recipients the aim was to discern user experiences that would signal a risk for the need for youth care. The chapter highlights that designing algorithmic governance in urban governance: (1) moved underlying problems within youth care to the background, (2) did not yield democratic tendencies as it did not incorporate voices of youth care recipients, although these were voiced during costumer journeys with youth care recipients that were specifically conducted in this context and (3) reveals how prototyping has its own (reproducing) logic, which makes that failure is not seen as problematic as the prototype is always focused on new experiments and different futures.

Chapter 6 analyses the **Pandemic City** as an experimental format for urban governance. This chapter gives an account of COVID-19 decision-making within an important decision-making forum in the Netherlands: the 'safety authority', responsible for regional crisis and disaster management in a large urban area. It highlights how timeframes structure the ways in which normative choices and dilemmas are considered and political decisions are made. This chapter identifies three timeframes that 'perform' a specific temporality: the 'no time to waste' frame, the 'taking the time' frame and the 'future time' frame. Together these timeframes form a specific composition of (1) patterns of action, (2) objects at risk, and (3) values that feature in decision-making. In this context, the 'no time to waste' frame dominated decision-making, thereby producing a solitary focus on a rather narrow concept of safety, while other timeframes and other voices, measures and values were marginalised, with specific consequences for health in the city.

Chapter 7 reflects on the way the different case studies together provide a critical account of the **Healthy City**. Here, I present the final conclusions and I outline the theoretical and practical implications in order to shape a Healthy City that is just. This final chapter highlights: (1) how urban health experiments involve different processes of inclusion and exclusion, and thus prioritize some voices, knowledge and values over others; (2) how shifting responsibilities between governments and citizens can be empowering and energizing for some citizens, while proving precarious for others and can also background systemic underlying issues; and (3) how the dynamic interplay between each experiment and existing institutional contexts can inhibit free experimentation, thereby limiting the potential of alternative perspectives and practices to come to the fore in urban health experiments.

The Healthy City can take on many different forms and the meaning of urban health experiments and the Healthy City is dependent upon their interpretation and implementation. Importantly, these meanings are not the same to and for everyone. Given the political choices being made regarding the Healthy City, it is important that this plurality is both embraced and discussed. To do more justice to urban health experiments there is a need to focus attention on these political choices in order to politicize the Healthy City.

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Chapter 2
The Laboratory City

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Introduction

Experimentation is increasingly seen as a promising avenue for urban governance. In order to find new pathways for approaching urgent issues such as the climate crisis, urban poverty, migration and more, cities are increasingly regarded as spaces for change, innovation and hope. In this context, cities turn to experimental governance, allowing urban labs to bourgeon in the urban landscape. Therefore, the urban lab is seen as a local answer to global problems by bringing together citizens, policymakers and (semi-)public service providers, who collaborate with local initiatives, to tackle local issues and develop alternative urban futures (Bulkeley et al., 2018; Evans, 2016; Evans & Karvonen, 2014; Karvonen & van Heur, 2014; Voytenko et al., 2016). This type of experimental urban space is increasingly regarded as a positive example of a public-private partnership that is locally embedded and focuses on learning and knowledge production. In this (emerging) mode of experimental urban governance and innovation, the lab[6] is considered *governance by other means* (Latour, 1983), because of its capacity for scientific knowledge production (Evans & Karvonen, 2014). As vehicles of private-public partnerships between bottom-up initiatives, knowledge institutes and municipalities, urban labs are furthermore regarded as strategically important (Evans, 2016) and positioned at the forefront of new socio-political arrangements in the city (Karvonen & van Heur, 2014).

Historically, the study of the laboratory as an epistemic object is rooted in Science and Technology Studies (Latour and Woolgar, 1986; Knorr-Cetina, 1995). Yet, the recent explosion of different forms of laboratories – fab, urban, living, test labs and more – requires that literature catches up with new ways of doing labs in the urban context. Crucially, academic literature on such spaces is burgeoning, largely focussing on the types of knowledge they produce, classifying them by process or output and being generally positive of their promissory potential. Scholars who engage with this new context reveal different typologies (Bulkeley et al., 2018; Dekker et al., 2017; Puerari et al., 2018; Steen and van Bueren, 2017), the participatory potential of labs, the relationship with the democratic ordering of society (Engels et al., 2018; Evans 2016; Nyström et al., 2014), the transformative political power (Evans, 2016; Karvonen and van Heur, 2014) and the potential for governance, innovation and participatory engagement (Bulkeley and Castan Broto, 2013; Bulkeley et al., 2018; Dekker et al., 2017; Puerari et al., 2018; Steen and van Bueren, 2017).

Among authors who maintain a critical lens are Karvonen and van Heur (2014) and Evans and Karvonen (2014) who plead for a critical reflection of practices that call themselves urban labs. In the same line Bulkeley et al. (2017) describe how the urban living lab and its mechanisms such as participation and learning are far from neutral practices, shaping instead urban governance. Bulkeley et al. (2018) articulate the need for two important lines of research on experimental urban governance in the field of urban living labs. Firstly, they argue for the need to

[6] While using 'laboratory' to refer to the classical understanding of controlled environments for experimenting, we name the urban projects described here 'urban labs' or 'labs' for brevity.

examine the emergence of these vehicles in terms of inclusion and exclusion. Secondly, they describe the need for new empirical analysis of the practices of these spaces by studying the formation, stabilization, and operation in different urban contexts to better understand their influence on urban governance. We have translated these questions into our fieldwork on urban labs, as we recognize the necessity for the same questions. However, despite critical analysis of urban lab spaces and practices, particularly of their framing as game-changers and inclusivity (Bulkeley et al., 2017; 2018; Evans and Karvonen, 2014; Ivanova et al., forthcoming; Karvonen & Heur, 2014), none have explicitly considered *how* these experimental spaces are constructed – and their makers – and how this affects city-making practices.

This paper takes a different approach to the current literature on urban labs. Building on debates that understand the lab as a socially constructed, politically wrought space, we analyse it as a process of becoming, instead of a tangible object *out* there. We locate the urban lab in the literature on *imaginaries*. We understand imaginaries as ideational ways to grasp social life, which in turn becomes a social entity itself, thereby mediating life (Gaonkar 2002: 4). As part of a lager *urban* imaginary of the experimental city, we argue that for city-makers the urban lab becomes an '*interpretative grid*' (Soja 2000) through which they read, act upon, and perform the city. We specifically focus on the urban imaginaries' performative practices. By doing so, we take up Lindner and Meissner's (2019: 9) and Hajer's (2017) calls for thinking through how urban imaginaries reconfigure the socio-spatial politics of cities, because, as this analysis will show, there is an urgency to consider their power and the political effects they have on urban governance.

Our analysis was guided by the research question: *"How do urban imaginaries construct practices of urban labs and what are the consequences thereof for urban governance?".*

In answering this question, we attend to the urban lab by employing the theoretical lens of the imaginary and thus revealing the work that goes into constructing and operating the urban lab. We analyse this process as *imaginative work* (Jasanoff et al. 2015). This analytical step allows us to ground the abstract concept of the urban imaginary and to unpack the ways in which the relationships between urban space, local government and citizens are being mediated. This step of unpacking reveals who is allowed and encouraged to experiment in the city and how, making visible how urban imaginaries have concrete consequences for city-making. Hereby we flesh out the value of imaginaries for literature on urban governance. The aim of the paper is therefore two-fold: to 1) foreground the performative power of the urban lab and 2) demonstrate how the urban lab imaginary has political implications for the city.
We do so by analysing the concrete practices of city-makers, a select group of elite actors that plays a key-role in urban lab experiments, within the city of Rotterdam, the Netherlands. This city explicitly presents itself as a site for experimentation (Rotterdam Municipality 2014). Our analysis is based on an ethnographic study of three relevant future-building agencies[7] and twelve urban labs throughout the city, using 30 semi-structured interviews and 12 participatory observations in the course of the conception, construction and operationalization of these

[7] We discuss these in the following section.

urban labs. The analysis empirically discerns three practices of imaginative work– branding, dreaming and assimilating– which, we argue, have consequences for urban governance and city-making. Before presenting our findings, we situate the paper's theoretical underpinnings and method.

Grounding the urban imaginary

With the current development of the city as a new agent of change and a site for experimentation, urban governance[8] too has become increasingly experimental (Evans et al. 2016). Experimentation signals notions of creativity and innovation while turning urban issues, globally, from grand challenges and policy documents into concrete actionable practices to be taken up by a variety of urban actors in specific places, locally. Within experimental governance the local government's role is transformed from a hierarchical structure to a more horizontal structure (Pierre 2005; 2011). It emphasizes learning in real-world settings, institutionalization of experimentation (Evans et al. 2016) and collaboration with a diverse array of actors to create synergistic solutions (Nyström et al. 2014). Experimentation in this context is aimed at achieving collaborative arrangements of actors and infrastructures in such a way that it creates an alternative and more sustainable urban future in a democratic and socially just way (Evans et al. 2014).

Many experimental spaces where urban issues are tackled innovatively and in collaboration with local actors are now qualified as 'urban laboratories[9]'. Transferring the laboratory vocabulary to urban spaces has become common practice not only for knowledge institutes, but also for local city governments, policy makers, urban entrepreneurs, designers, and private companies. Currently, the laboratory vocabulary is regarded as more than merely a heuristic for reading the city, but also as a mode of city-making – a practice of acting upon the city – through which the urban fabric can actively be changed. Urban labs are described as geographically bounded sites of experimentation and 'constructed sites of knowledge production' to which Karvonen and van Heur (2014: 381) attribute three fundamental achievements: (1) situatedness, (2) embracing contingency and uncertainty and (3) change orientation. According to them, the urban lab is initially designed for radical change, a transformation resulting in new conditions that are profoundly different than before, with the normative goal to generate desirable futures. In this way the urban laboratory is taken up as a local answer for all types of global issues and fits in

[8] With the term urban governance, we refer to the processes 'through which significant and resource-full actors coordinate their action and recourses in the pursuit of collectively defined objectives' (Pierre 2005, p.452). An (urban) governance perspective allows us to move beyond merely considering local state actors and institutions to incorporate new institutional arrangements that acquire involvement of actors from both civil society and the economy within these processes (Swyndgedouw 2005).

[9] Mobilizing laboratory vocabulary, in order to transfer the scientific authority of science to other places has a history in urban sociology (Gieryn, 2006; Guggenheim, 2012). For instance, the Chicago School transferred the epistemic authority of science into the field of sociology by interpreting the city simultaneously as a lab and a field site in order to exploit the scientific authority of both (Gieryn, 2006). As a laboratory, they framed the city as a controlled environment, in which scientific manipulation and observation could take place, in order to produce universally valid knowledge. Alternatively, as a field site the city can be spontaneously met, which refers to the embeddedness, the place-specificity with its own local characteristics.

the wider move of urban governance towards "experimental urbanism" (Evans et al. 2016) or "test-bed urbanism" (Halpern et al. 2013).

Although there is a tendency to presume that experimentation in the urban context is a wholesome venture in and of itself, the move towards experimental urban governance changes power relations: empowering some, while disempowering others, and favoring specific modes of knowledge over others (Evans et al. 2016). Indeed, research on urban laboratories shows that their practices are not neutral, but rather are pivotal instruments in shaping governance processes of urban transformation (Bulkely et al. 2017; Karvonen et al. 2014). For example, Oldenhof et al. (2019) show how urban labs serve as experimental settings that negotiate value trade-offs, such as between social issues versus the build environment or institutional collaboration versus autonomous activism in urban development. These value trade-offs, usually part of traditional political institutions such as local governments and councils, are now transferred to new settings (Bovens 2005; Hajer 2003). In this way experimental sites such as urban labs increasingly become a form of governance with political effects. This development warrants attention because, as Swyngedouw (2005) argues, while innovative forms of governance beyond the state hold the promises of bottom-up empowerment and democracy, they can be distinctly Janus-faced, revealing paradoxical outcomes as they open up governance innovation only for certain publics.

In this paper, we focus on the process of shaping urban experimentation as a specific type of urban governance, and their political consequences. We align our study with the work of Hajer (2017) who links governing alternative urban futures to the power of imaginaries and their performative effects. Therefore, it is fruitful to consider urban spaces as socially produced (Lefebvre, 1974) and to scrutinise the practices necessary for producing these urban spaces as constructed sites of experimentation, creativity, and knowledge production. For this purpose, instead of a tangible object out there, here we analyse the process of construction and operation of the urban lab as an interpretative grid: fluid ways through which the city is being read, dreamed and performed.

Social imagination is key to this endeavour, and it serves as our starting point here, taking inspiration from, and building on, scholars who have taken the concept seriously. Social imaginaries have been described as the force that shapes grand social processes and patterns of societies, nationhood, institutionalization, and modernity (Appadurai, 1996; Castoriadis, 1987; Taylor, 2004). They provide an understanding of society and enable practices within society, as they refer to '*the ways in which people imagine their social existence, how they fit together with others, how things go on between them and their fellows, the expectations that are normally met, and the deeper normative notions and images that underlie these expectations*' (Taylor, 2004: 23). They are symbols that require the work of imagination -instituted and maintained by a multitude of collectives to enact them- to turn into something more (Rupert 2018). In this sense, imaginaries are an ideational way to grasp social life which in turn becomes a social entity itself, thereby mediating life (Gaonkar, 2002: 4). Jasanoff (2015; 2017) departs from the social imaginary in developing the concept of sociotechnical imaginaries to account for science and technology as the most important forces of modernity. She explains how imaginaries about science and technology's possibilities are the product of social practices through which "science and technology become enmeshed in performing and producing diverse visions of the collective good" (Jasanoff 2015: 16)

Specifically, we see 'urban imaginaries' as a translation of the literature on imaginaries into the urban landscape; as a key process mediating urban life defined in the following way: "*the mental or cognitive mappings of urban reality and the interpretative grids, through which we think about, experience, evaluate, and decide to act in the places, spaces, and communities in which we live*" (Soja, 2000: 324). Instead of simply a "matter of the mind", the literature on urban imaginaries regards social imagination as having real consequences in the lived urban space. For example, the imaginary of a smart city prioritises different practices than a creative or family-friendly city. This is how urban imaginaries have material effects in the city. What is more, they are inherently political, as they shape and are shaped by power relations (Lindner et al., 2019). It is therefore crucial to study the *process*, through which the urban lab is produced and operates, in order to illuminate how (alternative) urban futures are 'imagined'. We argue that for city-makers the urban lab becomes an '*interpretative grid*' (Soja 2000) within a lager urban imaginary of the experimental city through which they read, act upon and perform the city. Attending to the urban lab as a processual take in this way, allows us to examine how the relationships between city, local government and citizens are being reconfigured.

To study this process, we attend to urban lab practices as *imaginative work*. We take inspiration from Jasanoff (2015; 2017) who briefly mentions this term when referring to the social practices of actors that perform sociotechnical imaginaries. Although she does not elaborate on the term, we delve deeper into it here as a way of 'grounding' the notion of urban imaginary and using it as an analytical tool, which allows us to scrutinize the practices of city-makers in the conception, construction, and operationalization of urban labs. This move allows us to make a tangible analytical connection between the imaginary as a concept and the mundane practices of urban labs (i.e., securing funding and recognition, attracting audiences, and gaining authority or thinking creatively to work against bureaucratic systems in the city). This 'grounding', we argue, is helpful for debates on urban imaginaries to become tangible and be employed for analysis of everyday practices. We engage with debates on urban labs, which we aim to enrich by injecting a critical perspective to their practices; debates on urban participation, which we aim to nuance by offering a less romantic view of the urban lab as participatory space; and debates on urban imaginaries, where we contribute an empirical case study of urban laboratories.

Key actors in the fabric of the urban lab

In order to foreground a processual take on urban labs, it is essential to consider their *do-ers*: the city-makers and organizations involved. A diverse array of actors collaborates in the urban lab setting, but to come into being the urban lab first must be thought up – and started up by their initiators. In this paper, we focus on this specific subset of actors because this focus reveals the work that goes into constructing and stabilizing the lab. Urban labs in Rotterdam are actively

encouraged by the following organizations: AIR (Architectural Institute Rotterdam), the Field Academy and the Creative Industries Fund (CIF), which we understood here as *future-building agencies*; organizational actors who organise the production of imaginaries (Savini, 2019). Future-building agencies are typically spin-offs of architectural firms that work with methods such as stakeholder analysis, scenario-making and marketing, dramaturgy, and visual narration. By catalysing energy in the context of building comprehensive images of the future, they wish to provide a mindset for institutional change and imagination of alternative urban futures. These agencies, we will show, have a profound influence in attaching the urban lab label onto urban initiatives. Often, it is by their encouragement that experimental spaces become an urban lab.

The Creative Industries Fund is a cultural fund for architecture, design and digital culture supporting innovative initiatives by designers, makers and institutions in the creative industries. The CIF has been putting out open calls for urban labs to work on spatial and social issues, as innovative forms of commissioning and testing grounds for urban renewal. This resulted in the financial support of a total of 52 urban labs throughout the Netherlands. The Field Academy is a Rotterdam based knowledge institute led by architects and designers that has developed a broad set of research methods to study urban development with and for the field. They work together with field partners and students with background in architecture, design studies, sociology, and pedagogy. Finally, The Architecture Institute of Rotterdam (AIR) is an institute that organises the public and professional debate about the city and her spatial appearance. It is responsible for the annual city-makers conference of Rotterdam[10]. The latter two agencies provide urban lab initiatives with a network and practical tools, such as the toolkit '*how to build a living lab in a day*'. Furthermore, they organise public debates, in which both narratives and visualizations of urban futurity play a key role. All three organizations need to be seen as special versions of governmental organizations as they are all subsidised by the municipality or the national government.

The active involvement of three future-building agencies explains why urban labs in Rotterdam specifically, but in the Netherlands more generally, exhibit a tendency towards design and the build environment. The initiators adopting the urban lab imaginary, turning their experimental spaces into urban labs, tend to have a background in architecture or design, are socially concerned and want to build a name for themselves by building their resumes. They refer to themselves as 'city-makers'. City-maker is a self-description we do not accept as such, yet we believe that all city residents are in a sense city-makers and that the term should not exclusively apply to professionals in the built environment or design. For the purpose of this paper, we will therefore refer to them as 'lab-makers', since this term articulates what we mean: the actors that construct the urban lab initiatives. Besides their professional interests in the urban environment, these lab-makers consider themselves residents in this context as they often start up initiatives in the urban area where they reside or work. The urban lab gives them the space and the opportunity to showcase their work in times of austerity. The same tendency applies to urban labs. Urban lab sites generally fill up spaces that became vacant during economic crisis, making them especially attractive partners for municipalities to fulfil tasks in the urban landscape.

[10] The city-makers conference is an annual workshop and space for making the city, initiated and coordinated by AIR in collaboration with other partners such as the municipality and the Creative Industries Fund. The conference is built on the premise and challenge that all who feel involved can contribute to city-making practices working from their own expertise, curiosity and ambition.

Methodology

We conducted a multi-sited ethnography (Hannerz, 2003) in the city of Rotterdam, the Netherlands, trailing the field geographically by examining different urban labs and socially through engaging with different actors and practices such as workshops, network meetings and public demonstrations, between January 2018 and December 2019. Rotterdam makes for a strategic research site for several reasons. Firstly, the tendency towards experimental governance is strongly reflected there, as the city characterises itself explicitly as a site for experimentation and innovation with references such as '*the laboratory of the Netherlands*'. Rotterdam aims to '*innovate and renew together with the civil society, knowledge institutes, urban entrepreneurs and citizens of Rotterdam*' (Rotterdam Municipality, 2014: p.4;), articulating experimentation as an explicit governance goal. Secondly, the city has a rich history of city-making practices (Franke et al., 2015), serving as a site for many urban lab initiatives. Finally, urban labs in Rotterdam focus on diverging issues ranging from mobility and re-developing urban wastelands to the city's air quality.

In conducting our analysis, we used a variety of sources and materials, interviewing relevant network partners and attending various meetings. We conducted semi-structured interviews with urban lab initiators (12), key-actors such as public opinion makers and directors of future-building agencies (5), municipal policy makers (3), unstructured interviews (8) with key figures (such as urban lab initiators, public opinion makers and future building agencies), for example during the annual city-makers conference held in Rotterdam, as well as interviews with urban initiatives that resemble urban labs but consciously refrained from using the terminology (2). We conducted observations (12) of meetups, open days, workshops, and semi-formal get-togethers of urban lab initiators, organised by future-building agencies. Simultaneously, we analysed text documents such as pamphlets, essays, manifestos, and booklets published by urban lab initiatives and the future-building agencies. All interviews were transcribed, and observations were processed into field notes. Together with existing texts, all documents were coded using the analytical software Atlas.ti. These were subsequently discussed at length among the authors. We analysed all data discursively and in line with a Foucauldian method, we did not pursue revealing a true meaning by what has (not) been said, but rather analysed statements for what they do, and the performative effects of what is (not) being said (Alvesson et al. 2000).

We experienced an increasing disconcertment with the use of the urban lab terminology, especially in the initial phase of our fieldwork. We observed actors using the term urban lab: strategically, reluctantly, with hesitation and even resistance. In line with sensitivities in post-colonial studies towards moments of disconcertment (Verran 2001) we attended to these

moments of disconcertment generatively and analytically (cf. Ivanova 2019). This led us to interpret the lab as an imaginary device of conveying a story, rather than as a tangible object. This inductively teased theme was consequently analysed through the lens of urban imaginaries. After the initial phase described above, all data were coded abductively resulting in the analysis of three practices of imaginative work. It should be noted here that, although we use the urban lab terminology throughout our analysis, we do not take the term as the thing in itself. Our analysis does not accept the urban lab as such, but analyses its ability to produce a particular form of experimental urban governance instead.

In what follows we analyse the urban lab through the analytical lens of imaginative work, taking inspiration from the literature on imaginaries. We discern three practices of imaginative work: *branding, dreaming and assimilating*. Firstly, we show how the urban lab is used to re-write the meaning of urban spaces through the work of branding. Secondly, we show the lab as a special 'free' space within the city, which is achieved through dreaming. Finally, we describe the work of assimilating, which sees lab-makers use narratives selectively, in order to engage differently with different publics through in- and exclusion. The discussion conceptualises these three practices of imaginative work and the un/intentional political effects these spaces produce.

Branding

> *We walk in on a group of lab-makers that are having a drink at the end of an event aimed at connecting urban labs and lessons learned. We introduce our research and they immediately remark on the term 'urban lab'. One of them speaks about having "adopted" or been "given" the label but says that this label makes little difference to their project of redeveloping urban wasteland into a space where creative professionals can work and a lively area for the neighbourhood. The others nod sympathetically. One lab-maker even starts laughing, saying; "now, all of a sudden we are a lab, well, that's fine by me". It was striking to hear an initiator arguing that what she was doing hadn't changed, because here they were as part of a community of lab-makers, learning from each other, advising each other, given publicity and funding, with the municipality taken an interest in them, attracting researchers and building their CV.* Field notes Open Day Creative Industries Fund, April 2018.

This field note is exemplary of how the term urban lab never fails to prompt discussion. This observation was not surprising to us, as most respondents would discuss the term at the start of interviews and urban lab-network meetings: what it is, who uses it, whether they felt the term represented their practice and how this label appeared to give a certain status, by which they could (re-)interpret their urban initiative or space as an urban testing ground. Based on this common problematization of the label, we argue here that the urban lab should be understood as a new spatio-temporal branding of city-making practices. This branding of urban space as a lab is what we define as the first of three practices of imaginative work. By capitalizing on an imaginary of scientific credibility, the above described urban initiative was successfully branded as urban lab.

Many actors used the term urban lab for its effectiveness in the opening up of possibilities, such as funding and recognition, rather than because they considered the term necessary for representing their experimental practice. By branding their initiative through the lens of the urban lab – often with some encouragement from future-building agencies – lab-makers received the status, support and funding that made their projects possible. Some of them were uncomfortable with the term, because they did not consider themselves a lab, while others did not feel the term to be of much importance:

> *The term is in itself nice and all, because well, you are experimenting and… - well of course it is, we are now in, an urban lab. For that matter, it is a nice word…* Interview, lab-maker urban regeneration, March 2018.

Nevertheless, these lab-makers did make use of the term, which resulted in great effects for their practices. Branding certain spaces as an urban lab however, does not necessarily start from the onset. Rather, urban lab projects play with different temporalities. Instead of a linear process, the urban lab revolves around purposely mobilizing the term at different moments in the process of experimental urban initiatives. Whenever actors branded the practice during its course, strategic purposes played a key role. Branding a lab retroactively meant that the findings from the real-world experiments were translated back into the lab. That way, the context of justification of that specific experiment had been relocated to the laboratory (Gross 2016), to the urban lab. Consequently, its practices are interpreted, justified, and portrayed in a different light and with a different meaning – namely, the activity becomes an *epistemic* object, something to learn from.

Sometimes, this branding was done quite literally by 'playing' lab. Let us take the example of an urban lab dealing with renewing an area's sewer system. The lab-makers of this initiative went so far as to 'play' the role of scientists at a conference for urban (re)development. They did this by putting on lab coats, arranging the setting as a lab and decorating the scene with test tubes-wallpaper. This messaging makes it clear that their project is credible and that they possess the kind of knowledge that is approved of and legitimate. By relating to the laboratory narrative, the audience was consciously being persuaded to see this initiative and its activities as a scientifically credible initiative.

In other instances, we find that playing with the narrative of scientific authority renders the practice attractive through the conscious manipulation of symbols:

> *Eh, sometimes yes, sometimes it is helpful to turn it into an urban lab because in the heads of many people it then immediately becomes clear like 'ah, oke a sort of stakeholders, experiments, prototypes…'* Interview, lab-maker (designer) involved in several labs, April 2018

Here, the lab-maker positions the urban lab to reorient the urban initiative for branding and publicizing purposes (cf. Kearns & Barnett, 1999), both linguistically and visually. This shows how metaphorization and using language to create new meaning, can help to understand how

imaginaries change the world as we know it (Gaonkar, 2002: 8). The urban lab is made to matter, by capitalizing on an imaginary of scientific authority.

Importantly, not all initiatives could be branded through the lens of the urban lab. One respondent active in the city-making community shared with us that the initiative to work with underprivileged youth and talent development did not qualify for an urban lab grant by the Creative Industries Fund, because it did not contain a "design aspect". This means that urban lab initiatives in Rotterdam and the Netherlands generally revolve around design or the built environment. The initiative to work with city air-quality for example, did qualify for an urban lab grant. In this case, although this initiative had an urban health mission, the initiators added a design component by scraping the particle pollution from walls processing it into tableware. Successfully branding an initiative as urban lab thus requires a specific type of *city-making* literacy, giving this type of urban governance a character of creative professionalism, initiated by a specific type of socially involved, creative urban professional.

Our data show that branding an initiative an urban lab is not a trivial act. Most urban labs started off as innovative, local development projects without an explicit goal for learning or upscaling as becomes apparent in the following quote in response to the question whether knowledge production is their goal:

> *No, look, residents don't ask for it, entrepreneurs don't ask for it, healthcare institutions, nobody is asking for it. So maybe it's the scientists themselves who offer themselves, but the stakeholders and the professionals that start the process of an urban lab doesn't ask for it.* Interview, lab-maker and participant multiple urban labs, May 2018

Subsequently, it is the act of branding the initiative an urban lab that turns it into an epistemic practice. While lab-makers generally had a local concern and prioritised doing over learning, researchers began to "*announce themselves for free*", according to our informants. Much like the authors of this paper, wanting to do research on these labs and in this way represented a link between place and epistemology. The urban initiatives, now taken as a lab become part of an urban lab-network. They are presented to the public as a testing ground for new urban development at network meetings throughout the country[11], opening up new possibilities for collaboration and investment and attracting new publics. With knowledge institutions taking an interest in them, the urban labs become a truth-spot (Gieryn 2006), where innovation, co-creation and governance merge. Branding an urban initiative as urban lab is therefore primarily a performative act, which tends to be reserved for a specific type of lab-maker with a background in design or architecture and possessing city-making literacy.

[11] In 2018 for example there were several meetings at Pakhuis De Zwijger, Creative Industries Fund, Rathenau Institute, AIR (Architecture Institute Rotterdam, city-makers conference amongst others).

Dreaming

> *The workshop participants are invited to 'think as though they are placed on a pink cloud'. This means to (temporarily) ignore possible obstacles and think freely about experimentation. The project is called 'The dream-factory', in which an old building is given an imaginary new function for the area and its citizens. Workshop participants are then enticed to use their imagination by literally turning urban maps upside down, turning south into north and vice versa (an act not to take lightly in the city of Rotterdam[12]), in order to re-imagine the city in the context of urban renewal. Later that day a participant mentions: "Here, things are possible that are impossible elsewhere".* Field notes, workshop by a future-building agency 'how to build a living lab in a day', February 2018

The second practice of imaginative work we delineate is *dreaming* the urban lab by drawing on the imaginary of an exceptional space. Actors conceptualise the urban lab as a *liminal space* that allows for both free creativity and failure. The fieldnotes above show how a future building agency used the urban lab to help actors carve out a space of exception. Although urban labs address different types of issues ranging from the quality of city air to urban wasteland redevelopment, their commonality is the conceptualization of a place for experimentation; a place where the impossible becomes possible. In this way, a protected, liminal (Zandbergen 2017; Oldenhof et. al 2020) space is brought into being, stimulating creativity and, importantly, allowing for failure.

We first turn to how this liminal space stimulates freedom and envisioning the city anew. Most urban labs we studied were supported by future-building agencies, whose work consists of visualizing the urban futures. They start from the idea that the world is no longer predictable, combined with a renewed experience of emerging complexity and wicked problems and the search for governing so-called 'unknown unknowns' (Chandler 2014). It is in this context that lab-makers search for alternative ways of dealing with urban issues, showcasing a "*shift from predictive power towards the power of imagination*" as one of our respondents framed it. Carving out a creative free space allows for envisioning alternative urban futures. A frequently used term by lab-makers is '*dreaming with*'. The urban lab is an invitation to dream, which takes place through a creative discourse, both through narratives (think as though you are on a pink cloud) and visualizations (turning city maps upside down). This way, the urban lab is designed to dream within, through and for the urban space.

Within the safe surrounding of this liminal space, lab-makers consider themselves "going against the grain" in city-making practices. This pioneering attitude has led to, for instance, actors demanding a role for different urban values of public tendering when a prominent building was sold to be newly developed. This was not easy, and the initiators had to push for their 'soft values' – publicly presented and published in a booklet as five principles - to become part of the process of urban redevelopment. Crucially, the intention to break free from constraints was not necessarily successful, as structural constraints such as dealing with project developers or

[12] The north and south side of city of Rotterdam (separated by the river Maas) are depicted and experienced as two very different sides of the city.

zoning plans can raise serious issues for urban lab initiatives. An urban lab initiative in another redevelopment area in the city, for example, failed because of too many financial interests involved. Nevertheless, constraints do not withhold lab-makers from experimenting with the urban space as one respondent instructed his participants to '*not think about the usual structural constraints and regard them as bears on the road*' because it would hinder creativity from the start. Hereby, the urban lab also gives initiatives room to fail, as we will show next.

A frequently articulated sentiment during our fieldwork was the lab's ability to fail. Since this type of urban space is meant for experimentation, it is also allowed to fail at its goal, while still producing knowledge. The idea of a lab, as a space of exception produces a secluded space for tinkering with urban issues. Here, participants do not have to live up to performance indicators and achieve targets set by for example local governments. "Going against the grain" also serves to carve out a space away from the bureaucratic underlying logic of organizing, in which performance indicators, outcome and accountability are leading practice. The Creative Industries Fund puts forward the need for free thinking in solving complex urban issues:

> *Experimentation in urban labs asks for special conditions: a creative free place to be able to explore and to test, aside from regular practice, demarcated and with a local focus, with enthusiastic initiators. The better these conditions, the more space for experimentation.*
> Manifest Urban Labs, Creative Industries Fund, 2018

This statement from the CIF's manifest on urban labs is exemplary for lab-makers' need to break away from regular bureaucracy which they regard as devastating for experimentation. An architect agrees:

> *Yes, there is freedom to search for a role. This creates unpredictability and innovation, that people do not have to think inside certain frameworks (…) we have to make sure that within urban labs, civil servants can have the freedom to take their space […] but what it is exactly that you do a nd how you do it, that is up to you, take your space (freedom).*
> Interview lab-maker (architect) urban development and urban resilience, April 2018

Hereby, the urban lab intents to go against a New Public Management type of governing the city (McLaughlin et al. 2002), aiming to give participants the space to work on issues as they present themselves in the field, in a learning-by-doing fashion. In this sense failure is seen as a learning opportunity. In this context, the urban lab envisions a space somewhere in between lab and field. The *field* with its own local characteristics and place-specificity is (in contrast to the laboratory) where the city is spontaneously encountered (Gieryn, 2006). Working with this characteristic, however, is also dangerously unpredictable. Therefore, urban labs are set up to create a protected space, 'in-between' laboratory, and field[13]; a place that would open up possibilities for action and attract similarly-minded project participants; it affords an alternative route for city making – one that promises freedom and invites creativity. This is one of the reasons for the growth of urban lab projects in the city: labs are "the right place for the job" (Gieryn, 2006: 5), because they provide the freedom to *dream and engineer the city*. The label offers both protection (from bureaucratic regulations) and possibilities (for failing, collaboration). A place 'in-between' laboratory and field is a place free of the constraints of both, opening up a space of exception that allows for experimental urban governance.

[13] The question of whether these territories are able to establish system change (Karvonen and van Heur, 2014) is out of the scope of this article and needs to be addressed elsewhere.

Assimilating

> *The urban lab should be seen as a narrative, it is a way of communicating what you are doing, communicating a new way of working.* Interview, director Future-building agency, 2018

The third practice of imaginative work we delineate is assimilating the urban lab. This practice revolves around incorporating the urban laboratory as a way of thinking and doing and appealing to the imagination of exception and scientific authority. According to respondents, the urban lab tells a story of envisioning a different way of city-making. We have seen lab-makers play with this narrative, mobilizing it strategically as a rhetorical devise. They do so quite aware of the connotation the label bears, signifying a place of scientific rigor and knowledge production. By assimilating the urban lab as a rhetorical devise, the urban lab is made permeable for designated publics.

Using the term has consequences for the notion of boundaries; of what (and moreover, who) is inside/outside the lab. In the literature urban labs are regarded as 'constructed sites of knowledge production' (Karvonen and van Heur, 2014) in which learning, knowledge production and system change are key. The experimental exercises within the prearranged boundaries are legitimized by the label. Yet, when the urban lab operates as a narrative, the place becomes open to include everything, without negotiating its boundaries:

> *You can see this as an urban lab, but also as a partnership, I leave the status indefinite and that indeterminate status is actually convenient because you can never be pushed into a particular corner.*
> Interview, lab-maker (architect) involved in several labs, April 2018.

Here we see that it is the term that is being negotiated, instead of the boundaries of the initiative. This particular urban lab is hereby enabled to include multiple social issues such as debts, employment and social resilience amongst others, without being rigorous in its approach. This lab-maker argues that sometimes it is useful to employ the lab-narrative, in order to gain legitimacy. This allowed him to capitalize on the metaphor of the lab as a place of science, while also remaining open and accessible for stakeholders.

In a similar vein, we analyse the example previously described in which lab-makers put on lab coats to 'play' lab at a conference for urban (re)development. By playing lab, they enticed an audience of policymakers and designers to see the urban initiative as scientifically legitimate. When the urban lab becomes a way of capitalizing on scientific authority the urban lab is made

permeable for designated publics, attracting 'the right' audiences. Yet, conversely, our respondents felt that capitalizing on the authority of science is not expected to speak to the imagination of everyone. The term is considered appropriate for certain publics only, such as other (city-making) professionals, organizations, and municipalities. In other instances we observed the laboratory narrative deliberately not being communicated. For example, in their communication to residents of a developing urban area, the lab-initiators felt that inhabitants would dislike it. They feared that the term would give the wrong impression, because lab conflates with experimentation, which would either be seen as patronizing of detrimental in the eyes of residents:

> *The question is how residents will interpret the term urban lab. Well, with the term urban living lab, I know for sure they will say: "just give my plate to Fikkie (the dog)*[14]*"* Interview, lab-maker, July 2018

The scientific narrative was only communicated with certain publics, in contrast to literature describing urban labs as open, collaborative sites of experimentation. Relating to this contradiction, the term 'middle-up-down' is important and must be unpacked. The term was used by one lab-initiator in communicating his initiative to the field. It subsequently caught on as the Creative Industries Fund took it over, believing it to be a good way to describe urban lab projects. Middle-up-down was meant to show how initiatives begin with the creative professional initiating the lab, then moving upwards to collaborate with the municipality, after which he or she moves down to the level of residents. As the lab initiators themselves often resided in the area, this movement from within the middle was presented as more or less similar to a bottom-up approach. This is an example of the way this notion of the lab mediates relationships and participation in city-making practices. The bottom-up turns here into middle-up-down, revealing that these sites of experimentation (re-)configure imagining the city as a governance tool.

Experimental city imaginaries

We conclude with a call for further analytical work on urban labs. These initiatives are becoming an important governance technique and their numbers, but also their influence, is only growing. Who is being included and excluded is materialised in the way we imagine and make our cities. Therefore, critical empirical analyses of how urban labs come into being and their political consequences are needed, to both better understand their influence and to help support their ability to reconfigure the relationships between urban space, (local) government and citizens.

More empirical work is needed, because we must understand how urban initiatives relate and differ in different context. The urban labs in our analysis are supported by future building agencies and this influences the interpretation of urban change they propose. This specific interpretation gives these experimental sites a character related to design and the built environment. A comparison with different kinds of urban labs, for instance in the context of scientific, technological or policy practices, and with urban labs in different countries (and perhaps supported by different funding agencies) would illuminate the role of context more clearly. Empirical cases from different institutional and national contexts would allow a deeper analysis of the role of lab-makers in urban governance. This paper has demonstrated how these actors negotiate their position within city-making as a narrative, a market and a dream, yet other strategies within different contexts would give a richer understanding in the epistemic politics of urban governance. Furthermore, we call for future analysis of the key-actors involved, broadening the focus from lab-makers to lab-users. Such an analysis would allow an understanding of the impact of imaginative work on other participants of urban labs.

Returning to the research question posed in the introduction – *How do urban imaginaries construct practices of urban labs and what are the consequences thereof for urban governance?* we argue that the city is being interpreted as a space of experimentation, with consequences for city-making practices. We have analysed the urban lab initiatives under study through the lens of the "urban imaginary" (Linder et al. 2019; Soja 2000: 324), a term that allowed us to reveal how lab-makers 'do' local initiatives for improving the city through what we have called imaginative work. This analysis identified three practices of imaginative work that are constitutive of the urban lab: branding, dreaming, and assimilating. Analysing this work as a process – as opposed to a fact – is crucial, because it reveals how lab-makers and future-building agencies construct and propagate urban lab imaginaries in order to allow for more mundane practices, such as receiving funding and recognition, thinking creatively to surpass municipal bureaucratic systems, and attracting audiences. These imaginaries shape these actors' practices to be exclusive within the urban labs landscape.

Analysing this process as imaginative work is often overlooked (perhaps because imaginaries are often perceived as abstract and lacking concreteness). In doing this, we have also shown that imaginaries are not 'out there' in the urban stratosphere, but rather become through the work of a multitude of actors. We have considered both lab-makers – mostly citizens at the professional level with a background in design and architecture – and future-building agencies – actors who professionally organise the production of imaginaries (Savini, 2019) – who are active in the construction and practices of urban labs. The paper's focus on the urban lab as a process of imaginative work considers both practices of city-making, as well as the actors involved. A processual take on the lab through the lens of imaginaries is better able to consider *do-ers* and *do-ings* together. Relating to Schinkel (2017) who argues against an understanding of social imaginaries as consensus-driven and as stable objects, we show that the urban imaginary literally and figuratively becomes a space for negotiating the city.

This point is important, as it brings up questions about experimental urban governance and participation, such as *who has access to and who is allowed to imagine and experiment in the city?* This political component becomes tangible in our analysis. The paper, therefore, connects literature on urban imaginaries to debates on participation (Puerari et al., 2018; Steen et al., 2017) and experimental urban governance (Bulkeley et al., 2013; 2018; Evans, 2016; Voytenko et al.,

[14] 'Just give my portion to Fikkie' is the direct translation of the Dutch saying 'geef mijn portie maar aan Fikkie' which is an expression people use to communicate that they really do not have a taste or desire for something.

2016), which have analysed urban labs as spaces that allow for and actively encourage citizen participation in their practices. We argue that a more nuanced understanding of lab practices will enrich these debates and provide a more critical and less romantic perspective of the urban lab as a participatory space by default. Our analysis questions whose imaginative work shape our cities, making these processes visible. While participating in the city is a problem of involving different citizens, we argue that imaginative work is not open to everyone – and even that participation in city-making is structured and mediated through the spaces of urban labs. We have seen that this is mainly a type of work within the framework of architecture and design, conducted by a specific type of creative professional and aimed at a specific type of audience – that is allowed in the urban lab. In this context, the term middle-up-down highlights how the relationships between the urban space, (local) government and citizens are reconfigured in favour of a specific type of literacy in city-making and urban governance processes. In line with Bulkeley et al. (2017), we argue that the urban lab is not a neutral term designating experimental spaces of inclusion. Instead, this paper has shown the work that goes into making these spaces possible and the ways, in which their publics are carefully (and differently) constructed. We argue that the lab operates as a space-mediator that makes a certain way of interpreting and envisioning the city possible. To that matter, we emphasize the need for employing alternative imaginaries that are oriented towards democratic, participatory and socially just forms of urban governance. This could serve as one way of addressing the participatory gap in current urban lab practices and open up the lab for broader audiences.

Finally, our argument is relevant to discussions about urban imaginaries by contributing an empirical case study of urban governance through the lens of the urban lab. We relate STS work on laboratization and labs (Guggenheim ,2012; Latour et al., 1986) to discussions on urban imaginaries (Linder et al., 2019; Savini, 2019). By illuminating how urban imaginaries have concrete consequences for city-making, we direct attention towards the value of broader considerations on urban imagination within the field of urban studies. In delving into and developing the idea of imaginative work, we were able to understand imagining as practical work. This focus on process as work manages to 'ground' the notion of urban imaginary and connect it to mundane practices, such as getting funding and recognition, attracting audiences, or thinking creatively to work against bureaucratic systems in the city. This 'grounding' is necessary for the debate on urban imaginaries to become tangible and be employed for analysing of everyday practices.

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Chapter 3
The Liminal City

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Introduction

In order to address urban challenges, such as the creation of livable and healthy cities, Urban Living Labs (ULL's) are set up as new forms of partnership. ULL's are different from other forms of public-private partnerships due to their focus on co-creation through experimentation, their explicit geographical embeddedness in a particular area (as a 'protected' experimental space), and the ambition to experimentally explore, evaluate and incrementally learn from new interventions in order to go beyond business as usual and shape alternative futures for cities (Bulkeley et al. 2016; Voytenko et al. 2016). The primary focus of studies into ULL's is an evaluative one: i.e. whether ULL's deliver their intended promises of innovation and learning. In this chapter we take a different approach by responding to the recent call of Bulkeley et al. (2016) to adopt a more critical approach to studying ULL's as a particular form of governance and wider politics of experimentation that shapes the urban milieu:

> *'The practices commonly associated with ULL—of partnership, participation, learning, data mining—are not neutral mechanisms but central ways in which governing is achieved and in shaping the possibilities for transformative processes.'* (ibid. p. 16).

By considering ULL's as a form of governance with political effects we are able to explore how value trade-offs are made in urban development in an experimental setting. Examples of potential value-conflicts vary from inclusion/exclusion of stakeholders to inclusive housing versus gentrification and accountability and learning versus rule-free experimentation. Interestingly, these value trade-offs in urban governance are increasingly 're-placed' from traditional political fora, such as municipal councils, to ULL's (Bovens 2005; Hajer 2003). It is therefore important to research how these trade-offs are made in these new spaces of governing.

Due to their relatively early stages of development and their experimental set-up, ULL's lack clear rules and norms for making and agreeing upon such value-trade-offs. As a consequence, ULL's are not yet considered 'governance proper' and seem to operate 'betwixt and between' what is normally expected. Moreover, being positioned in-between bottom-up and top-down approaches to policymaking, ULL's may generate certain benefits (crossing institutional boundaries; co-production of knowledge; experimental learning), yet may also generate new risks (lack of legitimate decision-making and accountability).

To further conceptualize the in-between nature of ULL's as an experimental space for governing and making value-trade-offs, we draw on the concept of liminality. This concept describes '*a condition where the usual practice and order are suspended and replaced by new rites and rituals*' (Ciarniawska and Mazza 2003, p. 267). Our research question is: Which key value trade-offs are made in the liminal space of ULL's and which new institutional rules emerge in order to deal with these trade-offs?

We zoom in on a Dutch case of ULL's in the Randstad. After the financial crisis in 2008, this area experienced an institutional void in urban development due to a double retreat of market developers and the local government. In this institutional void, new urban initiatives popped up to improve the livability of derelict areas and address social issues, such as health, in non-institutionalized ways. By temporarily dispensing 'common' practices and methods of urban development and introducing experimental modes of intervention, these initiatives gained attention of the local government and were subsequently labeled and funded as 'urban labs'.

On the basis of qualitative interviews with initiators of these labs and municipal policymakers and observations of meetings, we describe recurring value trade-offs of ULL's and discuss the emergence of new institutional rules to solidify this new liminal space for decision-making. Before doing so, we will first conceptualize the 'in-between' space of ULL's by using insights from liminality literature.

Conceptualizing the in–between: ULL's as a liminal space for urban governance

The concept of liminality was originally developed by French anthropologist Van Gennep (1960 [1909]) to analyse rituals of transition and the in-between time/space during an individual rite of passage (Short 2015). During the liminal period, usual norms and practices are suspended which may create feelings of uncertainty and anxiety. Van Gennep's work was further developed by Turner (1974; 1982) who argued that liminality can also be a positive space of liberation to do things differently and be creative. When being 'betwixt and between' social positions, a person can be free of obligations and therefore 'anything can happen' (Turner 1974, p. 13).

Although Turner and Van Gennep both used the concept of liminality in a temporal sense referring to rites of passage, in science and technology studies (STS) and organizational studies liminality has been widely applied in a spatial sense too, focusing on place and space (Rahmawan-Huizenga et al. forthcoming; Ivanova et al. 2019; Short 2015; Iedema et al. 2012; Ellis and Ybema 2010). Examples of liminal places range from border-zones, disputed 'no-man's land' and hospital corridors (Iedema et al. 2012) to transitory dwelling places at work (Short 2015) and 'non-places' like airports and hotels (Auge 1995).
In contrast to liminal places that are physical locations invested with ambiguous meaning (Gieryn 2000), liminal space is a more abstract product of social relations, values and meanings (Lefebvre 1991). Spatial categories such as boundaries and scale offer actors a means to demarcate space in certain ways for particular purposes. In case of liminal space, these spatial categories are particularly contested and perceived differently.

For the purpose of this chapter, we specifically focus on Urban Living Labs (ULL's) as a liminal space for governing cities in alternative ways. We argue that this conceptualization generates new insights into how experimental governance of urban development is done in many cities today. Due to the specific characteristics that are mentioned in the literature, ULL's can be viewed as liminal space in at least three respects.

First, ULL's claim to bring together stakeholders from different sectors—science, policy, society and market—in a so called 'quadruple helix mode' (Bulkeley et al. 2016). Liminality in this sense consists of ULL's being positioned in-between different organizational boundaries and different stakeholders that adhere to particular values, norms and rituals. This liminal space can be used to join-up efforts, bridge organizational boundaries and bring together 'top-down' and 'bottom-up' approaches of policymaking.

Second, ULL's can be conceived as liminal space as they are geographically 'emplaced' into specific urban contexts and areas while at the same time 'placeless' as insights from experiments in laboratories are claimed to be generalizable to 'anywhere' (Gieryn 2002; 2006; Gopakumar 2014; Karvonen and Van Heur 2014). By mediating between spatial uniqueness and placeless generalization, ULL's claim to address local issues, while also contributing to the development of universal strategies for global problems.

Third, thanks to their experimental status, ULL's are temporarily exempted from normal rules and regulations, which arguably enables them to experiment with new methods, (financing) models and concepts. This third sense of liminality closely aligns with Turner's conception of liminality as a free space to innovate (Turner 1974).

Common to all three aspects of liminal space is that value-trade-offs are part and parcel of daily decision-making. The implicit assumption in much of the literature is that ULL's – as a new experimental governance form – can contribute to more effectively dealing with tricky trade-offs that benefit the future of the city. For example, by bridging organizational boundaries, it becomes possible to co-produce knowledge and innovate on a system level. However, liminal space may also generate certain risks in terms of legitimate decision-making and accountability. Because ULL's often lack generally accepted rules and norms about decision-making and the inclusion of stakeholders in participation processes, they can lead to an institutional void (Hajer 2003; Leong 2017). In this institutional void, powerful stakeholders can potentially tweak decision-making their own way by prioritizing certain values over others. The institutional void is not all bad news though. In fact, it can be used to 'deliberate new institutional rules, develop new norms of appropriate behavior and devise new conceptions of legitimate political interventions.' (Hajer 2003, p. 176). Hence, liminal space offers opportunities for new contemporary forms of legitimate decision-making in addition to classical political fora.

By zooming in on the empirical case of ULL's in a large Dutch city in the Randstad area, we ask how different stakeholders attribute specific meanings to the in-between position of ULL's, deal with value trade-offs in urban development and in the process of dealing with these trade-offs- develop new institutional rules for decision-making.

Brief introduction into ULL's and methods

Our case study city hosts about 20 ULL's (Boonstra et al. 2018). Although some ULL's were initiated by residents/citizens of a neighbourhood, most ULL's are led by entrepreneurial profes-

sionals (in architecture, design, urban development) as local residents, that present themselves as engaged 'city makers'. The local government and housing associations are often partners in ULL's. Interestingly, big corporate companies do not play a key role in most ULL's in our case study.

Thematically, ULL's often focus on issues such as sustainability, energy transitions (e,g. making houses energy efficient), livability (e.g. of derelict areas), re-use of vacant buildings/areas, air pollution, and green public spaces. Remarkably, less attention is paid in ULL's to social issues such as debts, health and well-being. In addition, ULL's often aim to change the policy agenda, for example by introducing new criteria for public tendering or by creating awareness of issues of concern. With regard to finance, most ULL's make use of national and local subsidies provided by the Stimulation Fund for Creative Industry, the Architecture Institute (an organization that is partially funded by the local government) and the local government.

The aim of the research was exploratory in nature: to describe the key issues and dilemmas in the governance of ULL's. As researchers, we did not play a part in the design and/or evaluation of interventions developed in the ULL's. The second author conducted various semi-structured interviews (N=16) and informal interviews (N=8) with organizers of ULL's and policymakers[12]. In addition, observations (N=12) were conducted of workshops, meetings of ULL's and conferences and semi-formal get-togethers. This enabled the second author to observe social interactions and discursive framing of ULL's in situ. Last, we analysed documents produced by urban lab initiatives such as pamphlets, essays and manifests.

For data-analysis, all observations were processed into field notes and the interviews were transcribed by the second author as part of her PhD research about 'the experimental city'. The first, second and third author coded and extensively discussed the data for recurring themes. Since many respondents explicitly described labs as an 'in-between space' that connected the lifeworld of citizens with the system, this inductive theme was subsequently analysed in theoretical terms of liminality and different value trade-offs that were made in the in-between space of the ULL.

Liminal space: ULL's discursively positioned in–between system and lifeworld

Many 'city makers' and policymakers framed the ULL as a space 'in-between' the 'bottom-up' lifeworld of citizens and the 'top-down' system of institutions. By invoking this dichotomy, they discursively created a liminal space for labs to span boundaries between disconnected worlds, as becomes evident from the following statement from two well-known urban opinion makers in the city (one of which also participated in an ULL):

Table 1 Overview of the different characteristics of the labs in this study (next page)

[15] We would like to thank Wouter Berkhof, former intern at the municipality, who conducted part of the interviews together with Sabrina Rahmawan-Huizenga.

Urban Lab	Area of contribution	Stakeholders	Categorization
I	Urban and social development, social cohesion, Resilience, social safety index	Cooperation with municipality, citizens, healthcare institutes, a bank, research institutes, students	H. Partnerships in which civil society, market and state are involved
II	Urban renewal, public space	Architects in cooperation with municipality, entrepreneurs, students	E. Partnership between civil society and public organizations
III	Redevelopment public (green) space, mobility challenges	Architects in cooperation with municipality, local entrepreneurs, citizens	H. Partnerships in which civil society, market and state are involved
IV	Social urban development Social cohesion	Artists in cooperation with citizens, local healthcare institutes, entrepreneurs, farmers market	F. Partnership between civil society and private organizations
V	Urban redevelopment, built environment	Designers in cooperation with municipality, housing association, local entrepreneurs	H. Partnerships in which civil society, market and state are involved
VI	Health, wellbeing Social cohesion	Cooperation with municipality, local healthcare institutes, citizens, housing association	E. Partnership between civil society and public organizations
VII	Urban health, public health	Designer, architects, cooperation with municipality (temporary support) and (national and local) environment and health institute, citizens to a lesser extent, students	E. Partnership between civil society and public organizations
VIII	Redevelopment urban wasteland	Cooperation with municipality, entrepreneurs, citizens	H. Partnerships in which civil society, market and state are involved
IX	(Social) resilience, urban environment, energy	Initiated by municipality, cooperation with urban research institute, citizens (attempt), energy supplier, students	E. Partnership between civil society and public organizations
X	Urban redevelopment Public space	Architects in cooperation with municipality, local entrepreneurs, citizens, different local healthcare institutes, primary schools, housing association, real estate project development	H. Partnerships in which civil society, market and state are involved
XI	Social resilience, urban development	Formal cooperation municipality, students, citizens, research institutes, universities	E. Partnership between civil society and public organizations

'City making can best be described as an innovative way to connect lifeworld and system world on a local level. The lifeworld stands for the daily reality of inhabitants, working people and or (small) entrepreneurs. The system world stands for the government, supplemented with specialists and experts, institutions and powerful corporate companies. So the focus in urban labs is on the practice of connecting those worlds (…). An urban lab challenges the bi-polar model of government versus citizens: executives, civil servants and experts on the stage and angry citizens in the room. In an urban lab, everyone is sitting on the stage. Everyone listens to everyone.' (Arnold Westerhout and Hugo Bongers 2017).

In the above quote, the liminal position is associated with the possibility of equal conversation between stakeholders even though they hold different power positions and have different interests. ULL's in this sense create a space for Habermassian *Herschaftsfreie Diskussion*. This positive reading of liminality was reiterated by other respondents active in ULL's and officials from the Architecture Institute (fieldnotes citymaking conference). Moreover, the experimental nature of ULL's was used as a justification for temporarily 'putting aside' individual interests to be able to alternatively envision the future of the city (e.g. as more resilient, livable, inclusive etc.). Some ULL's experimented with role plays to switch stakeholder positions (i.e. of corporate developers, small entrepreneurs, individual renters) and create more equal and shared relationships. This was viewed as a necessary step to be able to move beyond fixed interests:

'We started playing games, like the prisoner dilemma: why don't you stand in our shoes? We will stand in your shoes and what does that mean? (…) We started thinking along with them and we said: your problem is our problem. You need to get rid of the buildings, which means for us an end to our rental space. So we both have an interest and how are we going to solve this together?'
(Initiator ULL with a focus on the built environment, September 2018)

In addition to (more) equal relationships between different stakeholders, other positive readings of liminality encompassed the possibility to 'cross over', 'join-up' and 'connect' different sectors. In this regard, the ULL was positioned as a place where the 'social' (healthcare, well-being, education) and the 'material' (mobility, energy, buildings) could happily meet and re-connect. Rhetorically, the metaphor of the system/lifeworld was a particularly useful resource as respondents argued that in the lifeworld of inhabitants these domains were not separate but part of a whole. This holistic view of citizens' daily life was contrasted with the 'siloed' departments of the municipality that worked according to different methods, financial systems and regulations. The in-between space of the ULL was thus framed as a possibility to connect the material and social in concrete local experiments: not by endlessly talking about it, but by means of design and visualizing new futures through well designed maps, video's and prototypes.

Finally, liminality of ULL's was framed in terms of space to 'freely' experiment with new forms of collaboration/interventions without having to comply with standard accountability criteria and output targets that are common in local government. By temporarily dispensing 'business as usual', it would become possible to experimentally learn, i.e. 'learning by doing' (Rahmawan-Huizenga & Ivanova 2022). The term *lab* however was used only in specific policy contexts. In communication with neighbourhood residents the term was rarely used and even actively avoided. As an organizer from the municipality remarks, using the term urban (living) lab would potentially alienate residents from participation:

'The question is how residents will interpret the term urban lab. Well, with the term urban living lab, I know for sure they will say: "just give my plate to Vicky (the dog)."'
(Initiator ULL with a focus on resilience, September 2018).

In a similar vein, the director of the local urban knowledge institute that promotes urban labs as a promising form of partnership remarked that he altogether avoided using the term in direct communications with citizens:

'"It sounds a bit denigrating: you live in a lab'
(director of the local urban knowledge institute, December 2018).

The experimental and liminal status of the ULL—that is seen to be productive in the sense that it creates a space for experimentation outside 'normal' administrative routines and at least partially leveling power imbalances—is regarded as to potentially backfire as inhabitants generally do not like to be guinea pigs or subjects of experiments. This raises the question how value-trade-offs are made within these liminal spaces.

Value trade-offs in the governance of ULL's

Below, five prominent value trade-offs are discussed that are pervasive in the liminal governance of ULL's. They respectively focus on the positioning of ULL's in terms of its relation to the institutional environment (collaborative or activist), key participants (professional or lay), focus (social or material), strategy for experimental learning (place-bound experimentation or placeless learning) and outcome of experiments (capital or societal value).

1) Institutional collaboration versus autonomous activism

In policy discourse, urban labs are portrayed as a neutral place: because of their 'in-between' status they could ideally 'connect' different worlds without necessarily choosing sides. Yet, in the daily management of ULL's, organizers often felt the need to take position: i.e. by working closely together with policy makers or taking an autonomous activist position. Given the fact that the majority of ULL's were partially financed by the municipality and national funds (such as the Stimulation Fund for Creative Industry), they already had to comply with institutional criteria regarding work methods and focus to be able to attract funding in the first place. Most city makers also stressed the need for financial support as ULL's lacked business models to generate their own income. Moreover, collaboration with the local government was deemed necessary to get things done:

'We think it is convenient to collaborate with the local government on all kinds of matters. We have

asked someone from the local government (…) whether he wants to be involved in this project. And of course, you need the local government with all kinds of little things. For example, in case you want less parking spots and you can convince people to give up their parking spot in exchange for extra greenery, then you need to coordinate with local government to ensure that they don't give off new licenses.' (Initiator ULL with a focus on public space, March 2018)

Strategic positioning sometimes had to be done publicly. During the yearly city-making conference (well attended by civil servants), initiators of ULL's had to position themselves on a line with two extremes: 'the local government sets the tone' and 'local initiative is leading'. Most initiators opted for an 'in-between' position, but stressed simultaneously the need to connect to local policy:

'You need the local government, otherwise you stay a hobby club.' (field notes city making conference, November 9th 2018).

To further solidify the connection with local governments which was considered crucial for the sustainability of urban labs, the Stimulation Fund for Creative Industries decided to change the funding criteria in 2018. Instead of providing financial support to independent local initiatives, municipalities can apply for guidance in setting up or improving their ULL. After selection, municipalities receive the help of a designer and expert in the field of ULL's.

Despite the fact that most labs considered collaboration with institutional partners as a matter of fact, some labs took an activist stance. An illustration is the ULL air quality that was successful in putting the topic of air pollution on the political agenda. By inventing playful interventions, such as tableware that was made out of polluted particles from the air, they visualized the 'invisible' problem of air pollution. Other city makers stressed the risks of working too closely together with local government as they could 'swallow up' the lab or use it 'instrumentally' to implement government policies. Examples of instrumental use of labs that were mentioned were solving failing participation policy of the local government (field notes city making conference 2018) and implementing housing policies that would benefit gentrified neighbourhoods ('cargo bike neighbourhoods', symbol of YUPPIES). In the view of these respondents, the liminal status of ULL's was a vulnerability which could lead to co-optation in the institutional world or—to put it in Habermassian terms—'colonization' by the system.
Other city makers adopted a more pragmatist stance towards the urban lab's positioning. Depending on the particular problem at hand, the ULL could switch its position from collaborator to activist. For example, when local government was unwilling to collaborate, an activist position could be adopted to put pressure on the government:

'That indeterminate status is actually convenient because you can never be pushed into one particular corner.' (Organizer several ULL's with multiple foci, April 2018).

The liminal status of labs thus creates strategic maneuvering room, as becomes evident in the above quote of a city-maker.

2) Professional versus lay participation and values

Despite the inclusive rhetoric of urban labs to include lay citizens from different backgrounds (SES/minorities), it was difficult to actually accomplish inclusive participation in practice. Especially after the financial crisis of 2008, ULL's were primarily initiated by highly educated professionals that often had a background in urban design and architecture. This creative professional group, sometimes dubbed 'the city making caste/bubble' (Boonstra, 2018), was keen to fill the institutional void in urban development that had emerged as a consequence of the retreating local government and market. The crisis thus presented an opportunity for professionals to do something good for the city (e.g. by developing derelict areas), while simultaneously upgrading their CV in a difficult job market by doing voluntary work. Because of their professional background in urban development and their ability to speak the right language and 'morph to the institutional world' (Interview city-maker, April 2018), they could effectively collaborate with civil servants and access financial funds to support their local initiatives:

'Certain well informed groups in the (local) society know how to find the instruments for city making easily. Often they are groups from neighbourhoods with an established city-making tradition or they are (local citizens) with a professional background related to city making (architect, designer, city planner, entrepreneur). Residents that want to do something in their neighbourhood but don't have this background have a hard time accessing the right channels.' (Boonstra 2018)

As a consequence of this difference in access, and the fact that the creative caste tends to live in central areas or in gentrified pockets, many neighbourhoods in the periphery did not have local initiatives that were labeled as ULL's. The ULL's that were located in more peripheral areas were based on policy initiatives of the local government and commercial developers, such as a mega renovation project of a public transport hub or a local government lead energy transition project.

The professional background of many city-makers and their sensibility to 'hot' policy issues had consequences for the values and types of interventions that were promoted in ULL's. Examples of dominant values were sustainability, circular economy, green living, work and healthy lifestyles. These values were operationalized in concrete interventions in various ULL's, varying from public campaigns to persuade residents to give up their parking spot in exchange for green space, the agenda-setting of air pollution by art projects, and energy transition projects for households (cooking on induction rather than gas), to community gardens and waterside regeneration projects. These projects enthused city-makers and policymakers and were viewed as an important step towards more livable and resilient cities. Yet, the values underlying these interventions clashed in various projects with views of lay citizens and residents:

'For many people cooking with electricity is a real issue. People find it silly to cook on induction. Then you can't cook, a lady explained to me. She said: "I don't eat dinner at someone's place when they cook on induction.' (Organizer ULL with a focus on energy transition, September 2018).

This same city-maker explained a recurring tension in her work between working demand driven versus tempting residents to get enthused about new ideas:

> *'Neighbourhood based working is based on the idea that residents determine what is important (…). Uh, but residents do not ask "could I get a resilient schoolyard? A water cooling tank? Or what do you think of creating a circular sewer system and what if we add shells to it?'* (ibid)

City-makers dealt with this tension in different ways. Some argued that it was sufficient to 'inform' residents about activities without necessarily requiring their input from the start; others argued that ULL's did not have to do 'representative participation' because this would lead to bland compromises rather than radical interventions that changed the future. In this regard, the framing of ULL's as space in between the lifeworld and system, enabled the justification that labs were something quite different than bottom-up participation or top-down policy. Working from a middle position, creative professionals and policymakers in civil service argued, it is possible to potentially bridge the gap between bottom-up and top-down initiatives, framing it as a 'middle-up-down' approach. Yet the results indicate that the bridging of worlds and ideas is more difficult than initially thought.

3) The social versus the material

Ideally, ULL's were viewed as a means to jointly tackle social issues (well-being, health, debt, work) and material challenges in urban development (energy sustainability, redevelopment projects). Both respondents in local government as well as ULL's mentioned that this was necessary given the highly fragmentized work methods of local government and the compartmentalization of social and material issues into different departments. Despite the ideal of joining up the socio-material, trade-offs between the social and material were part and parcel of ULL's. In fact, material challenges were often prioritized in many ULL's as key themes for interventions. With many city-makers having a background in architecture, design and urban development, for them, it made sense to primarily link urban interventions to buildings, physical locations and areas. Although city-makers mentioned dealing with social issues 'in the wake' of material interventions, social issues came less to the fore than the physical re-ordering of places. This was also noted by city-makers themselves:

> *'Urban labs often emerge in spatially defined environments: neighbourhoods, urban redevelopment locations (…). (Here) we explore whether urban labs can also be of value for non-spatial processes, such as problems of debt.'* (Document analysis: Pamphlet for city making, November 2018).

While it could be argued that debt problems also have spatial dimensions (i.e. some neighbourhoods experience a higher concentration of households with debts than others), this quote shows that social issues received less priority in most ULL's. Notable exceptions are two ULL's that focus on getting unemployed neighbourhood residents back to work. According to an interviewed city-maker, the relative lack of attention for social issues in most labs can also be explained because of the particular funding criteria for urban labs that required a design method:

> *'Well, our claim was that in a city such as (this) there are many young people who should be coached in an informal learning route. To make sure that they will become a good artist. That was the idea behind that urban lab. And this idea was already turned down in the pre-selection phase. Sorry, we like it very much, but it lacks a design element.'* (City-maker and opinion-maker, May 2018)

Most ULL initiators, however, did have a background in design and architecture, which explains why many initiatives were primarily focused on the built environment. Additionally, the fact that ULL's could also receive national funding from Stimulation Fund for Creative Industries explained why creative design was so prominent in many of them.

4) Place bound experimentation versus placeless learning and accountability

The label of 'urban lab' guaranteed a certain level of freedom in situ: i.e. experimentation with and learning from new ideas and interventions without having to comply with generic accountability criteria, such as key performance indicators, that can be applied anywhere. City-makers argued that a New Public Management free bubble was a necessary condition for experimental learning from new forms of local partnership and system innovation that could not be pre-defined in targets. By demarcating and embedding experimental ventures in a particular geographical area (e.g. a couple of streets or whole neighbourhood), experiments (and possible failures) were locally contained and granted a pilot status.

Despite the so-called benefits of experimentation, the relatively free conditions of the urban labs and their experimental status simultaneously raised concerns about the limited possibilities to upscale learning experiences and transfer lessons to other places (as best-practices). The Stimulation Fund for Creative Industries raised this concern in a recent manifest:

'Experimenting in urban labs requires special conditions: a creative free place outside of regular practice that explores and tries out new matters, confined to a specific area, with a couple of enthusiastic frontrunners. The more these conditions are in place, the more space there is for the experiment. Yet, those exact same conditions simultaneously ensure a limited spread and upscaling of learning effects. In fact, upscaling asks for embedding into an organization, representation, connection to frameworks, policy and regular budgets. Paradoxically, the free conditions of the experiment hamper the further upscaling of it: the pilot paradox!' (Stimuleringsfonds Creatieve Industrie 2018).

In addition, local knowledge institutes that supported urban labs urged initiators to monitor progress to enable exchange of learning experiences and to account for results. Especially labs that were closely affiliated with these local knowledge institutes were keen to do so by coupling their experiments to performance indicators of the local government, such as the social safety index. They thereby seemed to adopt the 'system' logic of the local government. Yet, other labs which took a more autonomous stance, resisted monitoring of their own activities, because they feared to be held accountable for (lacking) results, thereby being limited in their freedom to experiment:

'Normally speaking, they (local government) work with a long-term planning and public tenders. But in this area, they want to give themselves the space to not do that (…). They do not really want to make a planning. X says: "if I make a planning, then they will hold me to account.'
(Director local urban knowledge institute, December 2018).

As a result of this different approach, policymakers from local knowledge institutes questioned the fact whether this was a 'real' urban lab, since a 'real' lab would engage in monitoring of evidence and exchange of learning experiences.

Generally speaking though, most initiators of urban labs engaged in alternative forms of monitoring and reporting of learning experiences. This often took a narrative (written reports/stories) or visual form (pictures, small scale models of interventions, social maps):

'You have to learn from experiments, so yes, you need to write that down somewhere. That's why we wrote down our "principles' (new principles for public tenders based on citizen participation)."
(initiator ULL, with a focus on the built environment, September 2018).

The narrative and visual form of accountability seemed to be able to convey the place-boundedness of experimentation (showing the particularities of places), yet also lend itself for translating at least some lessons to other places, such as how to collaborate with different stakeholders or to connect various green initiatives in one network. The exchange of lessons was done during a yearly well-attended conference about city making. Additionally, some labs exchanged learning experiences with each other on a more ad-hoc basis by sending each other updates or informally meeting up for a coffee to catch up. By engaging in local knowledge exchange and alternative forms of accountability (visual/narrative), urban labs partially seemed to 'work around' the trade-off between place bound experimentation and placeless learning.

5) Capital value versus societal value

Despite the turn to alternative forms of accountability, many urban labs struggled to convey the societal value of their experiments in such a way that it would convince institutional stakeholders, such as local government and housing associations, to financially invest in successful experiments on a long-term basis. This issue was taken up by the Architecture Institute that commissioned a researcher to write an essay about the recent challenges of urban labs:

'The local government still works with project-based performance norms and less so with societal added value that is generated by (civil servants') efforts. As long as that doesn't change, regular professional work will be more important than city making of which the value is difficult to express in outcome targets or monetary value.' (Boonstra 2018)

Due to difficulty of capitalizing the 'soft' societal value of experiments, urban labs did not have a strong position towards powerful stakeholders, such as (commercial and public) developers. Despite good collaborations, being at the mercy of these powerful stakeholders generated feelings of dependence and fear. This was for example seen in the urban lab that focused on the built environment, where a group of local entrepreneurs had revitalized a derelict area after the financial crisis, thereby contributing to the livability for local entrepreneurs who were located in the area and the broader gentrification of this area. Although the local entrepreneurs were successful in setting up good working relations with the commercial developers in order to develop new criteria for quality-based tendering of the area, they feared that in the end commercial developers would prioritize 'hard' monetary value over 'soft' societal value, such as livability:

'With this initiative, everything is very soft. And that's problematic, because how are you going to develop an area based on soft values? How can you measure those values? (…). Now it's an exciting time and I am also fearful (…). What if the management of the housing association says: we just want to go for the money? (…). Then we are nowhere with our quality.'
(initiator ULL with a focus on the built environment, September 2018)

This trade-off between capital and societal value was not only experienced in this specific lab. In their national manifest for urban labs, the national Stimulation Fund for Creative Industry, signaled this as a broader tension:

'Urban labs try to revitalize derelict, unused areas with concrete societal initiatives. By doing so, they add value to the area which in turn enables large-scale redevelopment. The added value however is going to the developers and governments, whereas the pioneers are left behind empty-handed.'
(Stimuleringsfonds Creatieve Industrie 2018).

To change this situation, several initiators of labs as well as the Architecture Institute pleaded for a cultural transition:

'We need a new way of thinking about investments, accountability, value development and measurement and a cultural transition in the long run' (Boonstra 2018).

In line with this plea, initiators of ULL's discussed the possibility of developing societal business models to be able to operationalize the monetary value of societal interventions. As of yet, these discussions have not resulted in a different financial infrastructure for the urban labs in the municipality.

Dealing with trade-offs differently: a new social contract for ULL's?

Urban lab initiators as well as policymakers feel a lingering unease about how trade-offs are currently being dealt with. Although the liminal space of ULL's offers possibilities of doing things differently, it simultaneously creates vulnerabilities for the legitimacy of decision-making and the future position of urban labs. Precisely because liminal spaces lack clear boundaries and are fluid, they can be pushed back by institutional players, like the local government or real estate developers, that can mobilize formal mandates and rules.

In our case study we see that the liminal space of urban labs is currently at risk of being curbed and reigned in. Market developers and local government have started to regain the lead in urban development after the recovery of the crisis, whereas professionals that initiated the urban labs have less time for city-making now that the job market has recovered. With the new large-scale municipal mission to build 18.000 houses in the next four years, it remains to be seen whether the liminal space of the urban lab will be used in the future to incrementally learn from experiments and local forms of collaboration. Urban lab makers seem to be acutely aware of their vulnerable status. Not only in terms of the future use of labs in urban development, but also in terms of how value trade-offs currently are made in an institutional void.

As a response to deal with the vulnerabilities of decision-making in liminal space, various opinion-making lab makers as well as local policy makers, have plead for institutionalization of urban labs by developing a new 'social contract'. In a presentation by the Architecture Institute on the yearly city making conference, this social contract was presented as follows:

> *'A city making contract will ensure that the rules of the game, developed by urban city-makers and urban labs, will be coupled to smart and transparent tender procedures, to ensure that the future production of public housing and other major challenges will be dealt with in manner worthy of city-makers.'* (Document analysis: Pamphlet for city making, November 2018).

Key principles of this social contract include: 'equality of participants of urban labs' (in terms of determining activities, vision documents, etc.), 'publicity of data that are used in decision-making', 'transparency of process' (start and end date), 'manoeuvring room for civil servants to creatively think about the options that stakeholders put on the table'. This proposal for a social contract was subsequently taken up by the political party Green Left in the local council. In 2018, this political party filed a motion for establishing city making rules based on the experiences with the urban labs, including the introduction of new public tender criteria. Although the motion was accepted in the council, as of yet, no concrete actions have been taken to implement city making rules in practice. On a national level, the Stimulation Fund for Creative Industries has plead for a new legal status and financial arrangements to better support urban labs.

These local and national pleas can be understood as attempts to deliberate new institutional rules and norms in urban development. Supposedly, these rules would potentially enable stakeholders to make different decisions, e.g. prioritizing 'soft' societal value over 'hard' capital value instead of the other way around. The potential success of these emerging institutional rules in terms of more legitimate decision-making about value trade-offs depends on the incorporation and acceptance of these rules by traditional political fora (such as the local council) and institutional players, such as housing developers and local government.

Conclusion

In this chapter we argued that the primary governance challenge of is to effectively use their liminal *in-between* position to create livable cities. We conceptualized this liminal position in at least three respects: 1) ULL's are positioned in-between different organizational boundaries, stakeholders and domains (market, society, science, policy), 2) ULL's are geographically 'emplaced' in particular areas while at the same time being 'placeless' by generalizing knowledge to elsewhere 3) ULL's are considered a free space to innovate due to the temporary exemption from normal rules and regulations. Due to these liminal positions, ULL's are expected to more effectively deal with trade-offs in the creation of livable cities. For example, by bridging boundaries between market and society, it would become possible to co-produce knowledge and innovate on a system level. However, liminal space at the same time is claimed to generate certain risks in terms of legitimate decision-making and accountability. Because ULL's often lack generally accepted rules and norms about decision-making and the inclusion of stakeholders in participation processes, they can potentially lead to an institutional void (Hajer 2003; Leong 2017).

As our analysis demonstrates, the liminal space of ULL's offers both advantages and disadvantages for the creation of livable cities. Liminal space, for instance enabled the regeneration of derelict areas by joining-up efforts between local entrepreneurs, designers, housing associations and local government. In addition, the temporary exemption from normal rules and regulations was used to experimentally learn from new interventions outside the dominant NPM culture of local government. Yet, liminal space also created vulnerabilities. Despite the attention for inclusive participation and decision-making, initiators of ULL's (who often had a professional background in architecture or urban design) implicitly favoured design-led approaches to urban development and prioritized developments of physical buildings/areas over social issues that were less tangible, such as debt. Due to the dominance of this 'creative professional caste', inclusive participation by 'lay' residents, and their perceptions of what a livable city should constitute, was less of a priority. Another vulnerability in ULL's was the prioritization of 'hard' capital value over 'soft' societal value due to a lack of societal business models and the renewed dominance of developers and local government once they had recuperated from the credit crisis. These results show that the creation of livable cities is not merely a technical or neutral matter. Initiators of ULL's dealt with many value trade-offs in terms of its relation to the institutional environment (collaborative or activist), key participants (professional or lay), focus (social or material), strategy for experimental learning (place-bound experimentation or placeless learning and accountability) and outcome of experiments (capital or societal value).

In the making of these value trade-offs, ULL's can make an important contribution to the livability of cities, yet their potential is not entirely met. As van Montfort and Michels state in the opening chapter of this book, both management factors (legitimacy, responsiveness, stable funding, leadership) and contextual factors (path dependency, political environment, demographics, good governance), play an important role in how effective the contribution of partnerships is to the creation of livable cities. With regards to both sets of factors, our case study reveals that the ideal conditions are not yet in place. Lack of stable funding, leadership by a professional designer caste, and little participation by lay residents potentially diminishes the responsiveness and legitimacy of ULL's. Moreover, the path dependency of a historically strong

local civil service in urban planning and the large-scale nature of public tenders may limit the room of ULL's to maneuver and make their own decisions.

Because currently many ULL organizers feel uneasy about the vulnerability of the liminal status of ULL's, they argue for the development of new institutional rules for city making, such as transparent tendering criteria and transparency about conflicting values. Whether these attempts to institutionalize the liminal space of urban labs will result in a more powerful position of labs in the future will remain to be seen. However, an implication of institutionalization on request can be that liminal space of urban labs becomes less liminal. This can potentially address the lack of legitimacy in decision-making in which difficult value trade-offs are made, yet may also hamper the open-ended nature of experimentation by introducing bureaucratic procedures and co-opting labs into implementing formal policy. For future city-makers it thus remains a careful balancing act between cherishing the fluid nature of the in-between space for experimentation while at the same time being politically savvy enough to deal with institutional stakeholders that may instrumentally use this fluidity for their own purposes.

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Chapter 4
The Resilient City

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Introduction

Increasingly, the concept of resilience is used to make uncertain futures and complexity actionable (Chandler, 2014). Originally, the concept was introduced in the 1970's, as a descriptive, ecological term defined as the *"measure of the persistence of systems and of their ability to absorb change and disturbance and still maintain the same relationships between populations or state variables"* (Holling, 1972, p.14). Resilience quickly travelled across academic disciplines (e.g. ecology, psychology, sociology, organizational studies, urban studies) and policy domains (e.g. climate, social and health). Through its travels, resilience has gained new meanings, ranging from an individual capacity to cope with set-backs in life to collective mentalities of communities in bouncing back or even forward after crises and shocks (Walker et al., 2011; Walklate et al., 2013). Regarding the latter cities are increasingly taken up as the loci of resilience, offering promissory local solutions for a broad range of pressing global problems.

Although the resilience discourse is increasingly embraced in both policy and academia, there is a growing scholarship that critiques resilience as a continuation of neo-liberal thinking (Bracke, 2016; Davoudi, 2016; Halpern, 2017; Kaika, 2017). According to this critical line of reasoning, resilience is a neo-liberal form of governmentality because of the displacement of responsibilities, away from the state towards individuals to perform public tasks in entrepreneurial ways. Instead of a radically new vision for governing, these scholars argue, the resilience discourse is 'old' neo-liberal wine in 'new' resilient bottles.

In response to this critique, others have pointed out that we can neither assume that resilience is the new governance framework that will future-proof societies nor that resilience is a continuation of neo-liberal governmentality (Howell, 2015; Joseph, 2016; Rose et al., 2017). To avoid the trap of imposing a monolithic meta-narrative on resilience, resilience should be treated as a 'matter of empirics' (Howell 2015, p. 67) and be carefully researched as a concept 'on the ground floor' as it might 'provide handholds for a more progressive politics' (Rose et al., 2017: p.45). Taking inspiration from these approaches, we critically 'engage with' (King et al., 2021) resilience by interrogating how resilience vocabulary shapes policy and how it makes practices aimed at anticipating future shocks and crises governable in the here and now.

In this article, we empirically research how the resilience discourse is mobilized and used in daily practices of urban governance using a governmentality lens. Currently, urban governance is one of the main areas in which resilience has gained ground as a new way of governing (Coaffee et al., 2018; Evans, 2011; Hommels, 2018; Meerow et al., 2016; Mehmood, 2015; Vale, 2013; Walker et al., 2011). However, there is still a lack of understanding how resilience is transforming urban governance, as empirical studies on the resilience policies that are adopted and implemented in cities and on the tensions this raises are lacking (Woodruff et al., 2021; Pititdis et al., 2020). By foregrounding the various technologies, tactics, methods and procedures of governance (Joseph, 2018), we are able to gain insights into this. In this article we answer the

following research question: *What governing techniques are developed for governing the resilient city and how do they align or conflict in daily practices of urban governance?*

We conducted a multi-sited ethnography by 'following resilience around' different field sites and practices within the city of Rotterdam – the second largest city of the Netherlands – that joined the *one hundred resilient cities* network pioneered by the Rockefeller Foundation in 2014. We analysed how the local government attempts to operationalize the resilience discourse in public policy. Moreover, we scrutinized one district within the city as an exemplary case study of the contemporary resilience discourse. In the context of the one hundred resilient cities program this area – one of the poorest areas within the Netherlands – was set out to become the cities' first resilient district.

In what follows, we first elaborate on the discourse of resilience, using a governmentality lens. Second, we introduce our case, its context and the methods used in our study. Third, we present the analysis of our multi-sited case study. We distinguish five techniques to govern the resilient city: anticipating, transcending, laboratizing, monitoring and responsibilizing. Next, we illuminate the entanglements of these techniques by highlighting their alignments and frictions. We conclude with a discussion on how to place resilience as a new form of urban governance.

Governmentality: anticipating resilient futures

In this article we adopt a governmentality approach to analyse resilience. Governmentality is often contrasted with top-down government and sovereign power, where political power is exerted by (and attributed to) a central coercive organ through disciplinary techniques, surveillance and monitoring. Instead, governmentality is posed as providing a more dispersed and fine-grained perspective on political power and governance, as a less direct means of governing by shaping conduct 'from a distance'. In this view, governing takes place through various discourses, related social practices, and techniques of (self) governing (Lemke, 2001). This results in individuals regulating their behaviour according to *'available rationales of the collective, in a kind of enforced, managed and assessed liberty'* (Woolgar and Neyland, 2013: 26). Exactly because power is neither organized centrally nor oppressive, governance can take place from a distance in a pervasive manner through facilitation and encouragement. In this way 'free conduct' is actively constructed and guided towards responsible behaviour. In the art of governing however, both sovereign, disciplining power and dispersed, persuasive power overlap. This way, the 'conduct of conduct' proceeds in and through different institutions and disciplined individuals (Dean, 2010; Rose et al., 2006).

We build on a growing scholarship that uses governmentality to study practices of resilience. On the one hand, various authors working from this perspective have analysed resilience as neoliberal governmentality that responsibilises individual citizens and communities into a state of preparedness for future crises and shocks. By guiding citizens to conduct and evaluate themselves in ways that align with governmental objectives responsibilities are shifted from the state onto individuals and communities (Rose, 1996b). Within neo-liberalism, conduct is subject to logics of competition and market behaviour and characterized by a displacement of responsibilities away from the state onto a civil society of responsible and active citizens. Rather than a retreat of the state this means a governmentalization of the state according to market mechanisms. Hereby, citizens are free in their choices while expected to adhere to competitive rules and persuaded to be enterprising and responsible citizens not relying on state-support (Dean, 2010; Joseph, 2018; Rose, 1996a).

For example, Davoudi (2016) links resilience to self-reliant citizens who reduce their vulnerabilities in a way that fits governmental aims of bouncing back and preserving the status quo. Evans and Reid (2013) describe how resilience deliberately incapacitates citizens' political habits and tendencies and exchanges them for adaptive capabilities. While Joseph (2013; 2016) argues that instead of trying to change the world on a macro level, within the resilience discourse citizens are expected to adapt their behaviour and to thrive under pressure. In the same vein O'Malley (2010) describes how resilience produces citizens that are expected to exploit situations of radical uncertainty (O'Malley, 2010). Diverging from the 'risk society', resilience brings characteristics like vulnerability, unpredictability, transformation and adaptation into the governance of naturalized crises and uncertainty (Welsch, 2014). Some authors regard this as a post-political ideology in which resilient subjects show flexibility and adapt to rather than resist the conditions of crises and suffering (Bracke, 2016; Kaika, 2017; Neocleous, 2013; Reid, 2012; Welsch, 2014).

In more hopeful terms, authors like Chandler (2014) regard resilience as a fundamentally new governmental episteme, with a distinctively new understanding of emergent complexity. Here, resilience is posed as an essential part of a new social ontology, that depicts the world as inherently complex and uncertain and moreover, beyond our comprehension and control (Joseph, 2018). According to Chandler (2014), resilience is changing our understanding of existence into one of ontological uncertainty of complex life, contrasting Giddens notions of *ontological security* that secured citizens against hardship and adversity through state-supported welfare provision. It is a move from the liberal governmental reason of the 'known knowns' (which are based on linear and universal premises on governing human affairs), via neo-liberal reason of the 'known unknows' (knowledge gaps that can theoretically be singled out to become 'known' through deeper understanding of determinate relational causality) into the 'unknown unknowns' (implying inherent unknowability of knowledge gaps, of future disruptive events). Resilience exemplifies this shift as a new basis of governmental reason in the way that it proposes a self-reflexivity and responsivity as key attributes that need to be developed in order to govern on the basis of unknowability. Therefore, instead of trying to change the world, the aim of resilience is to learn how to adapt our behaviour (Joseph, 2018). In this way, resilience emphasizes a focus on adaptation and preparedness.

Recently scholars have pointed out that the resilience discourse is neither necessarily a continuation of neo-liberal governmentality nor something entirely new (Howell, 2015; Joseph, 2016; Rose et al., 2017). According to Rose et al. there is a tendency to take neoliberalism as a constant master category to explain and understand the arts of governing. They argue that

theoretical analyses like these do not consider the (partial) empirical novelty resilience entails and call for empirical analysis of the resilience discourse on the ground floor (Howell, 2015; Rose et al., 2017). Resilience discourse may rely on existing neo-liberal governing rationalities, but at the same time may invent 'new' governing techniques that align well with uncertainty, complex systems and a changing world (Howell, 2015). Therefore, instead of either old or new techniques of governing political rationalities resilience will likely show a shift and consist of a more hybrid mix as techniques are always undergoing modifications in relation to new problems, as well as preserving some old modes of thought and technologies. Empirical research of the resilience discourse would give new insights into the question whether and how resilience shapes policy and practices aimed at making future disruptive events actionable in the present.

Case and approach

Setting

The city of Rotterdam, the second largest city of the Netherlands, joined the world-wide Rockefeller 100-Resilient Cities initiative in 2014, launching its resilience strategy in 2016 in order to become, *'a city that is prepared to engage with opportunities and challenges of the future'*. Immediately, a Chief Resilience Officer (CRO) was appointed to implement 'resilience thinking' into 'the DNA of the city'. With the involvement of the CRO, the next move was to actively pursue the involvement of societal and governmental actors to use the 'resilience lens' in their practices. In this context, many initiatives connected their practices to the resilience strategy; local governmental actors were trained to apply resilience in their work, and resilience thinking became emphasised in policy documents and educational curricula. The resilience strategy on the city level subsequently led policy-makers and politicians to choose one specific district, the neighbourhoods of Bospolder and Tussendijken – commonly known as BoTu– to become the cities' first resilient district.

BoTu is a densely populated, highly diverse (eighty percent of the population is made up of 'new Dutch' citizens) and relatively young (BoTu has more residents between the age of zero to fourteen and a lower percentage of 65+ than the urban average) neighbourhood. Bospolder and Tussendijken are placed second and fifth on the list of the twenty poorest postal codes in the Netherlands. Almost 75 percent of BoTu households are in the 'low income' category. Many residents indicate to feel lonely and unhealthy, the unemployment rate is high (the area has an above-average number of residents without the appropriate diplomas for the current job market) and many households are living in conditions of severe debts. The housing stock consists for more than sixty percent of social housing (rental) with lots of houses of poor quality.

BoTu does well on other indicators. Residents feel connected with their neighbourhood, they are involved and want to invest in it. BoTu is popular for its facilities, citizens initiatives and various community networks. Policy-makers and politicians view the cooperative ventures in the district as an opportunity for continuing the upward trend in the social index in BoTu, as already seen over the past four years. Eventually this resulted in the program *"Resilient BoTu 2028, towards the urban average in ten years"*. The programs' ambition is to make progress within the area of: (1) work, language, debts; (2) healthcare, young people, parenting and (3) energy, housing and outdoor space.

2. Data collection and analysis

This article is based on fieldwork carried out between February 2018 and September 2021, with varying moments of presence. We conducted a multi-sited ethnography (Willis et al. 2000), following the resilience discourse around different field sites and practices on both the level of Rotterdam city and within the BoTu district specifically. Within these different levels of analysis, we conducted (+38 hours) observations of workshops, presentations, conferences, city/neighbourhood tours and an international summit on (urban) resilience (some open to the public, others by invitation). In addition, we conducted semi-structured (15) and unstructured interviews (7) with key-actors. Respondents were selected based on their involvement with designing, implementing and executing resilience policies on municipal or neighbourhood level (or both). The semi-structured interviews dealt with the interpretation of resilience, its governance and how resilience was practically implemented on the ground floor (for example, we asked respondents about their role within resilience policy, what they considered resilience to be, what they did to improve resilience, in what political-administrative context resilience took place and the relationship with residents, if and how the neighbourhood improved because of the policy). During the observations, we informally conducted unstructured interviews to be able to delve deeper into our observations (for example by asking about the relationship between municipality and residents, how they translated reactions from audiences back to the municipality, how they incorporated residents' reactions to presentations). Lastly, we triangulated our ethnographic approach with document analyses (+300 pages) of relevant resilience strategies and evaluations (see table 1 for an overview).

In our fieldwork, we followed resilience around different levels to see what the discourse does to the practices it claims to represent. We analysed the data discursively and in line with a Foucauldian inspired discourse analysis. This means that we did not pursue revealing a true meaning by what has (not) been said, but rather we analysed statements for what they do, and the performative effects of what is (not) being said (Alvesson et al., 2000).

All interviews were transcribed and observations were processed into field notes. Together with existing documents, all data were coded using Atlas.ti software. First, we analysed general topics that emerged inductively from the data such as, (1) a state of preparedness, shocks and stresses, risk and uncertain futures (2) the need for collaboration between multiple actors/sectors with different backgrounds with regards to resilience, network formation and synergy; (3) experimentation, change and creating learning environments; (4) accountability, outcome measurement and improvement; and last (5) empowerment of citizens and communities, people taking care of themselves and their surroundings, ownership, responsibility and active citizenship. Next, we analysed these inductive topics more deeply in terms of urban governance, as they made up different ways of governing the resilient city. Based on the literature on govern-

	City level	BoTu district
Interviews	Chief resilience officer (1), Deputy Chief resilience officer (2), Municipal civil servants (2), Directors Field consortium/knowledge institute (2)	Municipal civil servants (2), BoTu social entrepreneurs involved in local projects (5), Field consortium/ knowledge institute employee (1), Informal interviews (7) with knowledge institute directors and employees, municipal civil servant and local stakeholders working within the resilience program
Observations	Workshop "searching for resilient living environments: action research into social resilience" (February, 2018) Workshop "searching for resilient living environments: how to build a living lab in a day" (February, 2018) Workshop "searching for resilient living environments: work-session" (February, 2018) Masterclass Resilience Thinking (June, 2018) Knowledge festival, Municipality of Rotterdam, session: urban resilience (October 2018). City-makers conference, sessions: resilient living environments (November 2018)	District tours and presentations (twice in January 2020) Public presentation BoTu teams (February 2020) Urban Resilience Summit, three-day world-wide summit, Rockefeller Foundation (July, 2019) City-makers conference, sessions resilient BoTu (November 2019) Observation 'climate living room' September 2021
Documents	Resilient Rotterdam strategy, Municipality 2016 (+100 pages) Website resilientrotterdam.nl www.resilientcitiesnetwork.org Field consortium Literature study on community resilience (Doff, 2019)	Resilient BoTu 2028, towards the urban average in ten years, municipality 2018 BoTu monitor start, Field consortium 2020 (+100 pages) and Botu monitor progress, Field consortium 2021 (+100 pages) retrieved from https://verhalenvanbotu.nl/monitor/ Website gobotu.nl

Table 1. Overview of data

mentality and urban governance, we grouped these general inductive topics into five coherent themes and identified them as five governing techniques – anticipating, transcending, laboratizing, monitoring and responsibilizing. Subsequently, we analysed them in more detail with a focus on the characteristics of each specific governing technique: problematization, focus, instruments, actors and their politics (see table 2).

First, the concept of problematization allows us to highlight what needs to be governed. Problematizations, as 'active ways of positing and experiencing' (Osborne, 1997) problems, illuminate the constructivist and structuring nature of what is at stake within each technique. This is essential because the way in which an issue is problematized already relates to envisioned

Governing technique of resilience	Anticipating	Transcending	Laboratizing	Monitoring	Responsibilizing
Problematization	Emerging complexity and increasing uncertainty about the future	Organizational (municipal) silos	Bureaucracy, Lack of discretionary space	Featuring on 'bad lists' on both city and national level, low index score on prominent indicators	Residents lacking resources, skills and capacities
Focus	Attacking complex, interconnected global (future) problems locally in the present	Lever-effect to create synergy	Learning by doing, experimentation in real life settings	Indexing, benchmarking	Projects aimed at activation
Instruments	Forward mapping, scenario's	Boundary-spanners and interdisciplinary partnerships	Urban (living) labs	Social index+ Functional performance indicators	Life stories, Role models
Actors	Chief Resilience Officer (CRO), local government, knowledge institutes	Boundary spanners: Chief Resilience Officer (CRO), city-marines, municipal managers	Municipal policymakers, (semi-) public service providers, knowledge institutes, market parties and citizens	Knowledge institute and municipal policy-makers and municipal research department	Local government, citizens, civic organizations
Politics	Politics of affect	Politics of the greater good	Politics of exception	Politics of organizational interest	Politics of empowerment

Table 2. Overview governing techniques of the resilience city

solutions, instruments and methods used to resolve it (Miller et al., 2008). Next, the focus, instruments and actors of each technique highlights how governance is operationalized and performed, and by whom. Further, we show the embeddedness of each technique within a specific type of politics, while the pitfalls illuminate possible risks associated with each technique. Finally, after specifying each individual technique in the result section, we delve into their entanglements by analysing how the different techniques relate to each other; the ways they

strengthen or work against each other. This way we gained insights into the dynamics between the techniques and the governance of resilience as whole.

Results

Based on our analysis, we were able to construct five governing techniques that together form a hybrid mix of old and new in which a specific type of resilient futurity unfolds. In this next part we first elaborate on each technique on the basis of their problematization, focus and instruments and politics. Next, we illuminate the entanglements of the governing techniques by highlighting their alignments and frictions.

Governing techniques of resilience

Anticipation

> *"We are not going to wait until the shocks or stresses hit us, no, starting now we are going to work on a high level of resilience (…) We want to work on resilience preventively, not reactively after a crisis. Therefore, resilience is a strategy."* (Interview Chief Resilience Officer March, 2018)

Problematization. The first technique of governing the resilient city we delineate is anticipation. This technique is concerned with global uncertainty in an interconnected world characterized by vulnerability and high uncertainty about the future of (city) life. A wide array of issues – ranging from the rising water level, flooding, heatwaves, the widening gap between the rich and poor, migration but also cyber dependency, an aging population and the unsustainability of current energy recourses – are regarded as causing vulnerability. Within this context crises, shocks and transitions are framed as an inevitable and unpredictable part of the future. In order to be able to survive and even thrive in the face of future crises and transitions, cities should anticipate them, as they are the key places to bring about innovative solutions (Rotterdam 2016).

Focus and instruments: Different parties such as the municipality, the Chief Resilience Officer and knowledge institutes take up resilience as a tool to pro-actively create a state of living in preparedness. Anticipation is an important part of the daily work of the CRO in his attempts to mobilize multiple stakeholders and implement 'the resilience lens'. In this way, resilience means anticipating urban threats and turning them into opportunities[16]. To do this, actors use *scenario-thinking* and *forward mapping* to predict the assumptions and estimated effects of anticipatory interventions. Examples are the assumption that "investments in climate adaptation and energy transition increase the protective factors in the neighbourhood" or the assumption that "investments in residents' skills lead to more resilient actions" (BoTu Monitor, 2021).

[16] "Rotterdam and water: from threat to opportunity. Rotterdam lies largely below sea level, right at the heart of the river delta around which the Netherlands is based. The city is directly connected with three major rivers and is located right on the coast. It receives an above average amount of rainfall and also suffers from subsidence issues. Rotterdam has had no choice – it has had to learn to cope with and manage water out of necessity" Resilience Strategy, page 26.

Politics. Within this technique we discern a politics of affect. Through public performances, workshops, summits, masterclasses and strategy documents, the CRO creates a sense of urgency by repeatedly stating that 'we need to be prepared' and 'we have to act now', accompanied by images of disasters such as urban poverty, refugees, demonstrations and the destructive power of natural disasters. The policy rhetoric of resilience affectively taps into fears about the urban future. The future, inherently unknowable and mobilized as both fearful and hopeful, is brought into the present and called upon to act now. After provoking feelings of uncertainty and inevitability, the CRO subsequently offers a promissory rhetoric of resilience as the solution. In this way, the politics of affect result in the imperative to act now to prevent disruptive events in the future.

Transcending

> *"In the development process it was stated that there is a big water issue in this neighbourhood. There is an issue of resilience on the physical level, so to say. Subsequently the question becomes how to connect this physical resilience issue to existing social issues in this area."* (Interview deputy CRO October, 2019)

Problematization. The second technique, transcending, is concerned with overcoming organizational silos within urban governance. According to a city district-manager "actors are used to thinking in terms of urban problems and moreover to thinking of them single sided, while what we need to try is to think in chances and to connect, to de-silo." In order to become a future-proof city, various respondents argue, resilience should allow for transcending the current siloed organization of urban governance by joining-up services and collaborating between private and public parties. The ambition of transcending is to span the natural, physical, economic and the social world. As the director of the Field consortium, working with implementing resilience within the city argued:

> *"Resilience is something you can talk about with anyone, which is the added value of the concept (…) The concept brings things together. Before you had program A and program B and program C and now resilience is transcending, bringing things together"* (Director knowledge institute, 2019).

This quote highlights how resilience is regarded as enabling communication between different disciplines and groups. According to this director, it is what makes resilience so important to work with.

Focus and instruments. Transcending is operationalized as a leverage. The aim is to connect developments within the physical environment to social issues in order to create synergy. For example, by using interventions within the build environment to additionally create value for the area's social fabric. Hereto, different organizational silo's and public and private partners within urban governance need to be connected. This is done by involving boundary-spanners: specific key-actors who have the operational power to cut through existing bureaucratic reg-

ulations. In BoTu the Chief Resilience Officer and a so-called 'city-marine' who got assigned to the area are examples of boundary-spanners. They aim to produce a helicopter view and cooperation between different domains and parties. Moreover, interdisciplinary partnerships between municipality, citizens and market parties such as housing cooperation's and (local) businesses are encouraged. These partnerships aim to transcend existing boundaries in order to create synergy and hence more resilience.

Politics. Currently, different organizational domains each have their own organizational interests. Transcending deals with the politics of the greater good:

> *"Building a resilient city means (...) thinking beyond our own interests, and looking at the real questions that we face as a city, rather than just settling for the solutions that are already available."* (Rotterdam, 2016)

Transcending is an attempt to surpass the separate interests of domains and organizations by focusing on the greater benefit of the whole city.

Laboratizing

> *"BoTu is a testing ground for renewal and improvement. This means Resilient BoTu 2028 also needs to move with the times and respond to trends and developments"* (Resilient BoTu 2028)

Problematization. The third technique we distinguish is laboratizing: turning BoTu into an 'urban lab' for experimentation. Laboratizing is concerned with 'going against the grain': with new and experimental ways of urban governance in order to approach the knowledge gaps and the inherent uncertainty. Currently, knowledge gaps and uncertainty cannot be addressed properly within regular urban governance under new public management (NPM), due to organizational boundaries, bureaucratic regulation and associated red tape. The urban lab provides the discretionary space that is lacking within NPM in order to experiment with urban issues (Oldenhof et al., 2020) without having to comply with predetermined performance goals.

Focus and instruments. Urban labs increasingly bring together local policymakers, (semi-)public service providers, science, market parties and citizens— in a so called 'quadruple helix mode' (Bulkeley et al., 2016)— to create a place for learning opportunities on urban resilience. Central notions in the lab are *experimentation*, embracing *contingency* and *uncertainty* and the achievement of *change orientation*, the normative goal to generate a more desirable future (Karvonen et al., 2014).

Turning an urban space such as BoTu into a space of experimentation is a technique that particularly enables *learning by doing*. Here, the actors within a 'quadruple helix mode' work under circumstances in which both starting point and exact destination are as yet unspecified, and therefore turn towards experimentation. Confined by the boundaries of the experimental space, the urban lab then allows for trying out new things and for failure. In fact, failure is perceived as a learning opportunity. Actors involved in the urban lab are required to embrace fluidity and complexity of processes of urban change meaning the acceptance of unforeseen outcomes. Moreover, the learning environment of the urban living lab offers a way for scalable lessons learned to be exported to the rest of the city (and beyond).

Politics of exception. The urban lab can be regarded as space of exception: experimentation allows for the temporal exemption from normal rules and regulations, enabling stakeholders to experiment with new methods, concepts and partnerships. Ideally, this place of exception makes '*the impossible become possible*' as several civil servants expressed.

Monitoring

> *'The goal is: Towards the urban average in ten years.'* (Subtitle Resilient BoTu 2028)

Problematization. Fourth, we spotlight *monitoring* as a technique of governing the resilient city. Monitoring is concerned with BoTu's low index scores on the national and city level. Although, according to the numbers, BoTu residents feel connected with their neighbourhood and the district scores well on facilities and citizen-initiatives, the district mainly features on 'bad lists' (see context paragraph). These lists do not paint an optimistic picture of the neighbourhood and affects the way the area and the city as a whole are perceived. Monitoring is a way of accounting for the progress of interventions aimed at improving the district's resilience.

Focus and instruments. To account for progress of interventions, resilience is measured and monitored using the Index+ in a cooperation between knowledge institutes and local government. This Index+ consists of the Social Index 'plus' additional indicators from already existing instruments such as the Health Monitor. It means that the indicators that are used for monitoring are already existing (municipal) indicators. The Social Index is part of the Neighbourhood Profile, – together with the Safety Index and the Physical Index – a benchmark representing the city's strengths and weaknesses. The Neighbourhood Profile is measured through a survey every two years. The Social Index consists of the themes self-reliance, co-reliance, participation and connectedness as they are perceived by residents and also indicates how residents rate the general quality of life. The Social Index plays an important role in the Index+, while the Safety and Physical index are used for describing the context of the neighbourhood. Additionally, a local knowledge institute issues a yearly rapport indicating the progress in more detail[17]. This rapport documents the development of the program, both quantitative trough the indexes as well as qualitative through narratives, in order to support and evaluate the process.

Politics. The way in which monitoring takes place results in a politics of numbers in order to steer and control the district on measurable variables. In order to gain good scores, interventions that aim to improve resilience by getting the index up, are actively encouraged. Thus, the index steers action and determines what counts as 'practices of resilience'.

Responsibilizing

"At its heart, it's about the people of BoTu, and giving them control over how they improve their own social resilience." (Neighbourhood Manager, www.resilientcitiesnetwork.org)

Problematization. The last technique we highlight is responsibilizing. At stake here, is the central assumption within the resilience discourse that citizens in deprived areas are hit harder by disruptive events. The index shows that BoTu and its residents are lacking recourses, capacities and social capital. Moreover, many residents are dependent on income subsidies. It is assumed that these tendencies negatively affect resilience. The local government simultaneously assumes that neighbourhood inhabitants have self-organizing capacities they can mobilize, approaching it in such a way that *'self-organization in the city gets enough room and a flexible local government supports if really needed'* (Rotterdam, 2016). In this way, developing self-organizing capacities is supposed to create individual and collective resilience, enabling citizens to survive and thrive in the face of future shocks, crises and transitions.

Focus and instruments. Citizens are responsibilised into becoming self-reliant actors, who *'are continuously developing themselves'*. Responsibilization is achieved by active enticement from the local government to 'get active', for example through involvement in projects to improve the neighbourhood or social fabric or to partake in empowerment-, employment or language projects. Hereto, key-figures at central sites like community centres and schools, approach residents that are deemed in need of support. Active citizens are encouraged to work together with other residents, local government and entrepreneurs to strengthen the resilience of BoTu. For example, residents are empowered to get a qualification in order to improve their employability and earn a basic income. Also, they are encouraged to participate in networks in which to address issues such as talent development, debts, learning new (21st century) skills and child rearing. Here lies a reciprocal relationship, emphasising active citizenship and responsibility as a precondition for receiving social support and services. Additionally, residents are empowered to build a network in order to acquire the social capital to help them create community resilience. In order to empower and activate others, role-models share their life stories focusing on what empowered them and how they now give back to their community.

Politics. Within this technique we discern a politics of empowerment. In enticing, optimistic ways, the local government actively involves, presents and rewards local role models as good examples of resilient citizens with the aim to empower others to become active and involved. The claim that *'BoTu comes from the people'* is a moral appeal towards generating feelings of community, a sense of belonging and active involvement.

[17]Unfortunately, at the moment of writing there was no information yet about how the index+ has evolved over the years. The safety index however, had shown progress in the years previous to the program which directly affected the involvement of a key-actor during the BoTu program. We describe this in more detail in paragraph 4.2.3.

Entanglements of resilience

Below, we analyse the hybrid entanglements between different governing techniques in practice. The results show how some techniques productively align whereas others conflict, with important consequences for urban governance.

Alignment of anticipating, transcending and laboratizing

As a first entanglement, we found that anticipating, transcending and laboratizing tightly align. Promissory policy rhetoric about the future of the resilient city, as a technique of anticipation, highlights optimistic attempts to cut through or transcend existing organizational boundaries and structures by creating alternative spaces of experimentation in urban living labs. In fact, thereby laboratizing the urban fabric of the neighbourhood. To reduce the effects of global uncertainty and future crises, city districts are labelled as experimental spaces where assumptions about resilience can be tested (e.g. energy transitions as a stepping stone to address social issues) and form new interorganizational partnerships between private, public and societal partners:

"BoTu is a unique experiment where we are finding out REALLY in an integrated way how to work on resilience at a relatively large scale, a whole district. It's the WHOLE package, not only about climate adaptation or energy." (Chief Resilience Officer, resilientrotterdam.com)

Because the urban lab operates as a *liminal* space, this is the exact spot to experiment with techniques such as transcending existing organizational structures in urban living labs in order to anticipate resilient futures. Liminality in this sense means being positioned in-between different stakeholders and organizational boundaries, which can be used to transcend those boundaries and join-up efforts. Because it is called an experiment it allows for failure and actors dare to let go of old ways of working in order to go against the grain to freely experiment and create a place where the '*impossible becomes possible*', as respondents argue. Moreover, the imperative to act, inherent in anticipation, aligns perfectly with the experimental mentality of laboratization – through 'learning by doing' in the urban lab.

In our research, the alignment between anticipating, transcending and laboratizing is strikingly illustrated by the energy transition that is framed as a good example of working on a resilient urban future. This project highlights how the energy transition (as a way of anticipating a more sustainable future), is used as an experiment (laboratizing the urban fabric) to test assumptions about connecting physical interventions with social interventions (transcending the boundaries of these different municipal silos). In this way, the energy transition encompasses all three techniques to fulfil the promise of more energy proof neighbourhoods.

The assumption here is that energy transition projects in BoTu do not only contribute to (future) climate resilience, but can also be an impetus for social resilience. This is captured by the metaphor of the leverage: a (physical) input force (e.g. energy projects), can create a greater (social) output force (social resilience). To establish such an effect, the International Archi-

tecture Biennale Rotterdam (IABR) appointed social housing flats as the place for the implementation of the energy transition — replacing gas with renewable energy from the harbour or industry. This housing complex is largely populated by elderly citizens and citizens from a lower social-economic status with diverse ethnic backgrounds, which is regarded a vulnerability according to resilience-thinking. Within the BoTu programme the experimental venture of the energy transition was therefore taken up as an opportunity to combat loneliness, debts, language barriers and care. First, this was done by becoming a familiar face for residents. Local community workers and volunteers sat at the entrance of the building with *"literally coffee and a cloth over a table saying: Good afternoon, who are you?"* (Interview city marine, April 2021). Simultaneously, a team of two community workers handed out roses to residents, knocking on every door in order to get to know the residents. This approach later evolved in a 'climate living room' for residents to have a chat, get to know each other, and learn about what the energy transition means for them, creating social ties in the neighbourhood. Second, since interventions aimed at a new type of heating and isolation were conducted, technicians and coaches had access 'behind the front door' as they entered peoples' apartments to check the quality of their current heating system and whether the apartment was isolated . Being inside of peoples' homes was at the same time viewed as an opportunity to learn and talk about social issues citizens might have such as unemployment, debts, problems with language and care, concurrently putting them under a regime of supervision (Peeters, 2019) in a combination of care and control (Schinkel et al., 2011). When something was perceived as problematic, the coaches contacted community workers who made sure to connect the resident to the relevant institution, like debt counselling, social work, language courses or simply to other inhabitants for social contact.

This example highlights the alignment between anticipation of future energy transitions, transcending of organizational silos — connecting the physical with the social, but also municipal department of Sustainability and the department of Social Development— and laboratization of urban spaces into experiments that are ideally scaled up to other parts of the city.

Alignment of anticipating and responsibilizing

The alignment of anticipating and responsibilizing, resulted in precarious outcomes on the ground floor. Both techniques are concerned with a central assumption within the resilience discourse that deprived areas and its citizens will be hit harder by future disruptive events. The numbers show how BoTu residents lack recourses such as work, sufficient finances, language skills and social capital. To decrease this vulnerability, the resilient BoTu programme responsibilises residents into taking control over their lives as an anticipatory practice:

> *"A telling indicator of social resilience is the extent to which residents experience self-direction and control over their lives. Only then can they also anticipate changes or adapt instead of just reacting"* (Resilient BoTu Monitor 2021)

'Active' citizens are expected to be better prepared to anticipate future disruptive events. According to the CRO this requires that the local government adopts the new role of the enabling state. Rather than determining and implementing everything themselves, local government needs to facilitate citizen engagement: *"Citizens should be enabled to do the right things, as long as the goal is clear: liveability and the willingness to change"* (Field-notes Masterclass Resilience Thinking, 2018).

A first example of this alignment are projects enabling residents 'with a distance to the labour market' to develop skills that prepare them for future jobs, for example in the field of sustainability and the energy transition. In these projects, participants are activated and empowered to learn new skills, such as implementing charging stations, installing solar panels and chores like isolating deprecated apartments. Although this can be regarded a good example of linking the energy transition (as anticipatory practice) to teaching residents' new skills and empowerment (as a responsibilizing practice), the project leader indicates that it had currently not offered participants concrete new perspectives regarding stable and full-time employability.
Other projects regarding employability reveal a similar tendency. The difficulty lies in finding (full-time) employment after the project has completed. The majority of the participants did not find part-time nor fulltime employment after participating voluntary in employability projects. This shows that the alignment between anticipation (for the future job market) and responsibilities of citizens (into voluntary work) result in precarity for citizens rather than more social security.

In a similar vein some active key-actors in the neighbourhood who already performed unpaid labour in the neighbourhood were now co-opted by the BoTu programme. Their unpaid labour became institutionalized and more professional. In return they were rewarded by being enabled to develop the necessary skills to participate in the current job market by offering them the opportunity to follow educational courses. However, there was critique on the fact that inhabitants voluntarily participated in projects without getting paid for the services they provided. For example, job-coaches and community workers argued that participants should be financially rewarded for their efforts. The question expressed by a community worker during a public debate became *'why is there financial support for technical projects while the social has to be performed by volunteers?'*

An additional example of precarious outcomes of the alignment between anticipating and responsibilizing is a 'mother-group' that was mobilized as vehicle for, and prime example of, social resilience. This group comes together every month to inform parents, mostly mothers, about safety issues regarding their children and the neighbourhood. In addition, members of the mother-group – as role models – were also asked to organize social activities to strengthen the social fabric of the neighbourhood, thereby learning new organizing skills (as part of empowerment) as well as potentially attracting new mothers to join in:

> *"How you give shape to empowerment, that also included the first public square programming that mothers programmed their own public square. That was really holding back (...) so that they program themselves and that they come up with activities themselves. Figure out for yourself what that costs and how to do it (...) But meeting is very difficult, making agreements is very difficult, agreeing together on*

what activity to do is difficult. Well it was real, I had to hold back and make sure I did not intervene. That is giving them space and making sure they do it themselves. Because the 2nd, 3rd and 4th square programming went like a charm. Sometimes you have to let it go and then be patient and then it won't work out the first time." (Interview municipal civil servant, April 2021)

Although it is hard to argue against mothers organizing activities to strengthen the social fabric of their neighbourhood, it also shows that resilience in BoTu is primarily executed through unpaid labour of women. These examples – role models, participants in employment projects and mothers – may indeed be taken up as best practices of empowerment and resilience on an individual level. However, when residents are empowered in the face of anticipating transitions and future crises, without any real perspectives of putting the obtained capacities into practice on a level that can sustain a livelihood, resilience appears to be a rather precarious practice.

Laboratizing and transcending versus monitoring

This last entanglement highlights how progressive attempts of laboratizing and transcending conflict with the technique of monitoring based on indicators. This conflict is particularly caused by the performativity of indicators and the dominance of organizational interests supported by it.

Firstly, a conflict arises between laboratizing and monitoring. Central premises of laboratization are experimentation and 'learning by doing' through embracing contingency and accepting unforeseen outcomes. In the urban lab practices, these premises were not always reconcilable with the BoTu monitor. In the case of the BoTu monitor it is the social index that for a large part determines what counts as resilience and what not. For example, institutionalized voluntary work scores on the index whereas the inhabitant who runs a soup kitchen in his basement does not. Therefore, some municipal civil servants opposed the use of a uniform index in BoTu as the central governance ambition due to the curtailment of experimentation and its standardization effects. As one civil servant (strategist) indicated: *"these indicators could obscure the districts' uniqueness"*.

The accomplished rise on the safety index also caused a performative effect. The 'city-marine' – who as a progressive boundary-spanner helped many experimental projects taking off – had to leave because her mission was deemed accomplished:

Well, now BoTu wasn't even in the lowest 25 anymore (...) Well, then my colleagues said: 'you can no longer say that that is an emergency'. (Interview municipal civil servant, April 2021)

With the parting of this city-official – with her power to cut through existing bureaucratic regulations – the boundary-spanning capacity inherent in the technique of transcending, runs the risk of being pushed to the background with organizational interest becoming once again more prominent. This is a genuine risk as the BoTu monitor states that aside from some progressive boundary-spanners positioned at the top, the municipal apparatus of civil servants still works within a siloed administrative context that does not allow experimentation to be accounted for.

Secondly, there is a tension between transcending and monitoring. Although new interorganizational partnerships are initiated in BoTu, for example between the municipality, housing cooperation and (entrepreneurial) citizens, in many instances organizational politics still prevail. For example, the municipal silo 'urban development' withdrew itself from an interorganizational partnership in BoTu aimed at experimenting with the urban development of a derelict old factory area by stimulating community building. Due to European tendering legislation, the municipal urban development department felt they did not have the room to be part of this urban development experiment. According to the actors involved: *"the municipality commits to integrated working at management level, but not all departments within the municipality are set up in this way of working together."* (Resilient BoTu Monitor, 2021). It turns out that transcending silos is impeded by their own administrative context and organizational interests.

Likewise, organizational interest became apparent when the municipal department of real estate sold a BoTu community centre which had been redeveloped by volunteers and was considered a best practice of social resilience producing a strong social fabric and inter-organizational collaboration. The public outrage about selling the building on the market was great, given the fact that inhabitants had added social value to the building by redeveloping it through connecting/mobilizing different stakeholders in the neighbourhood. While the neighbourhood centre was supported by some departments and actors of the local government (such as the city marine), the real estate department argued that financial value was more important than the social value of the building, thereby disregarding inter-organizational collaboration and community building.

What these examples together make clear is that transcending organizational silos and the experimental 'learning by doing' nature of the resilience approach conflicts with the performativity of indexes and the administrative- legal framework that municipal actors (have to) adhere to. Because organizational interests prevail due to siloed targets, transcending municipal silos or organizational boundaries within experimental spaces turns out more a policy rhetoric than a reality.

Conclusion and discussion

Our research of resilience as a 'matter of empirics' gives new insight in how to place resilience between a progressive politics and cruel optimism. Resilience might on the one hand open up a space for creativity and action and thereby 'provide handholds for a more progressive politics' (Rose et al., 2017: 45). On the other hand however, resilience could entail a form of cruel optimism (Berlant, 2011; Bracke, 2016), referring to either the situation when something that is desired in practice turns out to be an obstacle for flourishing, proving toxic upon attainment or the emotionally charged attachments to fantasies that are forever out of reach. Our results show the resilience discourse has the potential to be both depending on the governing techniques used and the interactions between them.

We identified five governing techniques that are part of governing the resilient city of Rotterdam: anticipating (resilient futures); transcending (siloed organizational interests); laboratizing (the urban landscape by setting up experiments as labs); monitoring (progress through indicators) and responsibilizing (citizens and communities to be become self-reliant).
Some of these techniques show promising attempts to govern in 'new' ways. For example, urban laboratization aims to move beyond styles of governing that are based on pre-determined performance indicators and departmental goals by allowing for a degree of uncertainty through experimentation and learning by doing. Additionally, anticipation of the (resilient) future surpasses a focus on checks and balances by foregrounding uncertainty. Moreover, transcending was aimed at overcoming municipal silos in order to govern urban issues in interdisciplinary partnerships between municipality, citizens and market parties.
Other techniques can be perceived as a continuation of neo-liberal thinking. First, responsibilizing individuals to become more self-reliant is a technique of governance that can be found in neo-liberal policies (Joseph, 2018; Peeters, 2019; Rose, 1996b). Within the resilience discourse in our case study responsibilization clearly plays an important role, as the local government aims to entice and enable citizens to be prepared and thrive in the face of (future) shocks and transitions. Moreover, monitoring through the social index is aimed at 'improving' the neighbourhood and its citizens, for a great part by putting in place checks and balances with commonly used contexts and indicators from separate silos.

The way resilience is shaped not only depends on these individual techniques but also on the way they are entangled in practice, highlighting the importance of following the concept through its travels (Howell, 2015; Pitidis, 2020; Rose et al., 2017). When techniques align (in case of anticipating, transcending and laboratizing) this can create opportunities for long sought-after policy aims such as integration of public domains. However, techniques can also align in such a way, as was the case for anticipating and responsibilizing, that it only increases the precarious position of certain groups of citizens, for example when the unpaid work of women is highlighted as a prime example of resilience; when sustainable employment is out of reach; and when residents are guided to rely on themselves and each other regarding shocks and transition. In line with Lorey (2015), we recognize this as a form of governmental precarization (Lorey, 2015); a type of governing through uncertainty in which precarity is maximized while security is minimized.

Different techniques can also conflict as in the case of monitoring and transcending and experimentation, limiting the potential to reach their aims. This conflict is not inherent to the techniques themselves but arises in how they are used and positioned against each other in practice. Monitoring can also function as a reflexive tool (Wallenburg et al., 2021), thereby strengthening experimentation. In our study however, monitoring resulted in organizational interests that risk hampering practices of laboratizing and multi-disciplinary approaches to urban issues.

Importantly, rather than foregrounding resilience as hurrah-word (Bovens, 2005) and an optimistic tool for becoming prepared for future disruptive events, it is paramount to engage in political discussions about the conflicting interests at stake in designing the resilient city. The initiatives operating within the resilient discourse in this study are in themselves creative and hopeful city-making practices. However, the way governmental techniques are set up and work out in practice, partly through the entanglements of different techniques can (unintentionally) produce unjust outcomes. The fact that hopeful attempts might actually have cruel effects, is something to consider when designing the resilient city.

As the resilient city discourse is burgeoning many cities around the world are eager to learn about implementing resilience. We wrap up our discussion with some guidelines for this agenda. The relevance of our paper for other cities lies in its empirical reflections. We show that what happens under the header of resilience is not straightforward and leads to different practices that are sometimes contradictory or that turn out not to be helpful (even harmful). This serves as a valuable insight. Although different cities face different challenges, and the resilient city is not a one-dimensional policy guide, it is possible to draw some lessons. These lessons should not be seen as a blueprint but as reflective insights that sensitize actors involved in resilience policymaking. Below we describe four generative insights for designing the resilient city. Moreover, in table 3 we describe pitfalls and reflexive guidelines for each individual governing technique that other cities, in our view, should consider when working with resilience as a policy guide.

Firstly, it is paramount to be mindful of existing techniques and the way they interfere with newer ones (e.g. laboratization), instead of naively approaching them as separate change-makers. In practice, resilience policies consist of old and new governing techniques that are entangled in different ways. Older, yet established policy tools will run through new attempts of implementing the resilient city. Policymakers should take these entanglements into account when designing resilience policies.

Building on that, secondly, recognizing the potential of certain techniques does not discard academia and policymakers alike from the obligation to critically scrutinize their (unintended) consequences. This includes attention for the way different techniques interact with each other.

Thirdly, in reflecting on those consequences policymakers should reflect upon the question if this design leads to a 'just city' (Fainstein 2014), taking the notion of precarity (Lorey 2015) into account. This means asking the question who is served by implementing resilience policy.
Lastly, through the technique of anticipation, the resilient city runs the risk of becoming a post-political instrument (Kaika, 2017) for dealing with urban issues. When anticipating urban issues such as urban heat, flood risks or increasing socioeconomic inequalities, underlying causes should be considered. The fact that underlying causes generally have a structural character on a meta level does not absolve policymaking and science from articulating and addressing them as much as possible. Ideally, the resilience agenda should instrumentally address urban issues while simultaneously creating more awareness about why these issues exist in the first place.

Governing technique of resilience	Anticipating	Transcending	Laboratizing	Monitoring	Responsibilizing
Pitfalls	(1) Reacting to symptoms of crises instead of the underlying causes (2) Always preparing for the prior disaster.	Silos working against each other: different accountability systems and financial budgets	(1)Insufficient room for genuine experimentation; (2) No learning cycle	Hitting the target but missing the point: too much focus on achieving targets but missing overall aims	(1) Burdening people in precarious positions; (2) Giving hope but unable to fulfil promises; or promises do not fulfil actual needs
Reflexive guidelines	(1) Create awareness concerning the broader stakes and conditions at macro level while addressing urban issues practically on the meso and micro level (2) Focus on adaptation and improvisation	(1) Articulate the different interests and concerns, search for shared matters of concern; (2) Align accountability systems and financial budgets according to shared interests	(1) Create conditions for open experimentation; (2) Identify and align with appropriate knowledge infrastructure and choose an appropriate research design that focuses on 'learning by doing' instead of 'doing before learning'	(1) Engage in reflexive monitoring in which targets are not set in stone; (2) Create awareness for narrative forms of accountability in addition to monitoring based indicators.	Reflect on question of social justice: ask who is served by implementing resilience and if proposed hopeful promises are indeed able to produce just outcomes for the people involved

Table 3. Lessons learned

With regards to future studies, it is crucially important to study how the techniques work out for citizens in practice in the long run. For example, whereas using the implementation of the energy transition to detect and combat social issues can be seen as a way of working across policy divides, it can also be viewed more critically as combining care and control as it puts citizens under a regime of supervision (Dean, 2010; Peeters, 2019; Schinkel et al. 2011). Small forms of resistance in practice, for example within the critique expressed about unpaid labour or the public outrage about selling a building with an important social function for the community can be important starting points for such critical reflection. The same goes for citizens' everyday routine of 'doing' resilience by taking care of each other and their living environment in one of the poorest urban areas in the country – perhaps offering a view on 'real' forms of resilience (King et al., 2021 p. 932).

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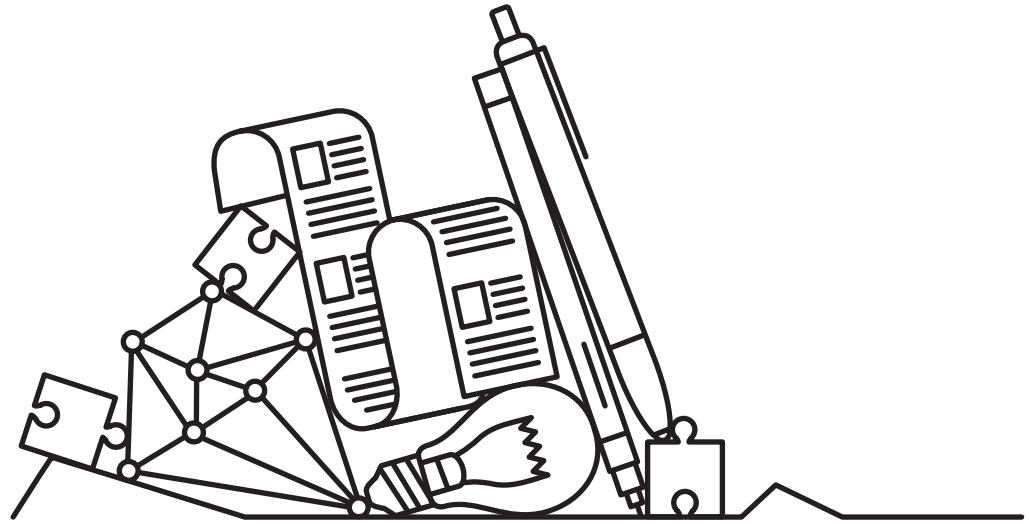
Chapter 5
The Algorithmic City



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Introduction

Increasingly, smart city discourses are focusing on digital experiments or prototypes of a digital welfare state (Kersing et al. 2022). The smart city discourse expands its typical approach of taking on issues ranging from optimizing traffic flows to measuring urban air quality for lowering pollution levels, to other domains. This means that gradually, municipalities are expanding their focus on smart urbanism or smart infrastructures, by finding out "*if and how they can do something with 'big data' in the social domain*" (van Zoonen 2019: 20). This turn towards data-driven social policy results in the construction of a digital welfare state (Alston 2019; van Zoonen 2019).

Within data-driven social policy or – more specifically, algorithmic governance – a specific type of data use that is being developed is *predictive analytics*. Predictive analytics is an analytical tool aimed at finding early warnings signals through data use. This development results in experiments set-up around the search for possibilities regarding prediction, tapping into the political administration of prevention by creating predictive algorithms. While developing predictive analytics in the social domain are usually built around predicting the risk of fraud, other employments are also possible such as the prediction of child abuse (Eubanks 2019; O'Neill 2017) or, as in our case study, where prediction has the aim to ultimately reduce the need for complex youth care in times of austerity. Combining data from different organizations would allow for 'early detection' of complex care demands and possibly preventing this demand.

Despite its popularity, the turn towards algorithmic governance warrants attention because of the impact algorithms can have on people's lives regarding issues such as privacy and discrimination. Given their influence on urban governance there is a pressing need to focus on algorithms *empirically* to scrutinize what they do to/in the world as they make up new rules, norms, and interventions 'on the go' (van Zoonen 2020) and because of the different ways in which they "overtly and covertly shape life chances" (Kitchin 2017). Therefore, in response to growing imaginations regarding the possibilities of using big data and the techno-optimistic and utopian fantasies that surround many smart city projects, many academics followed Shelton's et al. (2014) call for researching "the actually existing smart city". Although this call was not initially directed at smartness within the domain of social policy, the novelty of this development has not been matched by many empirical studies yet. Our empirical analysis of the co-construction of a data-driven tool for urban youth policy, fills this gap.

Zandbergen (2020) argues that a focus on the ideal (or illusion) of 'smart seamlessness', characterized by smooth collaboration and instant technological responsiveness, ignores the messiness, breakdowns, and incompatibilities that make up *actually existing* smart cities. In line with Zandbergen this paper highlights the incompatibilities and breakdowns within a social domain project geared towards the production of an algorithm aimed at preventing youth care. In this paper, we give an account of our ethnographic engagement with 'Workshop' – a group

dedicated to experimenting and innovating urban youth care, in an initiative that attracted different actors such as (professionals and parents) in youth care and municipal policy makers. Since growing up in the urban environment was perceived as posing additional challenges due to the large scale of issues such as poverty, health inequalities, criminality, and a lack of good housing, this particular project pursued innovating youth policy, by doing 'something' with (big) data and prediction. To this end, the project aimed to produce alternative knowledges to supplement and enhance (and possibly even surprise) existing statistical knowledge regarding urban youth and the risk factors that shape their life chances in order to shape new preventive youth policy by conducting costumer-journeys – a concept central to design thinking – and creative brainstorm sessions with key-actors representing youth care experience such as youth care policy makers and professionals. Eventually, the initiative's shared ambition was to co-construct a data-driven tool for the early detection of factors signalling a possible need for complex youth care.

In the context of democratizing smart cities in socially just ways, this endeavour is particularly interesting, as adding design thinking to the development of data-driven policy potentially puts the user perspective centre stage thereby potentially democratizing algorithmic policy. In this context, the claim made by data feminists D'Ignazio and Klein (2020) that data cannot represent or address problems on its own, is crucial. They raise the question what work is necessary for information to become considered as data that are trusted and considered as facts that can be acted upon as such, and moreover provided by whom (D'Ignazio et al. 2020) – as an epistemic question regarding whose knowledge is accepted in constructing the healthy city (Horstman et al. 2022). Building on these questions, we are committed to making visible the labour that goes into the co-construction of a data-driven policy tool.

By means of participatory observations we followed Workshop between 2019 and 2023, to illuminate the work that went into the creation of a predictive model. This means studying the design of a data-driven policy tool, its decision-making process and the wider system of thoughts, institutions, politics, and infrastructures that shape its production (Kitchin 2017), answering the following question:

> *"How did the experimental set-up of putting the experience of youth care users centre stage allow for the co-construction of a data-driven tool for urban youth policy?"*

In the spirit of the alternative data driven work (Shelton et al. 2014) of Workshop in the form of (youth care) costumer-journeys, we structure our findings as an ethnographic journey in order to reveal the travels of a data-driven imaginary. Before we present our findings, we first situate the paper's theoretical underpinnings, followed by the method and its context. We end the paper with a discussion of the implications of experimenting with designing data-driven urban governance.

Theoretical frame: data–driven urban policy

Generally, the smart city is explained in terms of a specific relationship between contemporary urbanism and the use of ICT (Batty et al. 2012 in Zook 2017; Kitchin 2013; Townsend 2013). Large amounts of digitally collected data about city life are used to accomplish urban governance tasks. Smart city urbanism promises a new way of understanding and addressing urban problems, in which traditional urban infrastructures are coordinated by and integrated with ICT, with a focus on the effects of ICT on the urban landscape, urban governance and urban life. Until recently, the smart city was mainly focused on technical fixes in the physical environment. Gradually, the smart city discourse is also applied in the social domain of welfare, thereby creating a 'digital welfare-state' (van Zoonen 2020; Kersing et al. 2022). However, measuring and steering mechanisms seem less easily applicable to social life due to the complex relations and care needs that evolve over time. Therefore, the movement of employing smartness from the physical domain into the social domain raises new questions about the construction of data-driven policy and its consequences.

The digital welfare state is primarily operationalized in the implementation of data warehouses (for the structured storing of large amounts of data), data dashboards (for customized real-time analyses) and – most importantly for our case-study – predictive analytics (for the prediction and prevention of individual problem behaviour) (van Zoonen 2020). Data, as "*the modus operandi and raison d'etre of contemporary urban governance*" (Zook 2017: 7) are thus put centre stage in the realization of the vision on smart urban governance. In this context, data are often presented – by commercial parties and governments – as 'evidence-based' (Halpern et al. 2017; Kitchin 2013) information that can be used for "*anticipating and resolving problems proactively*" instead of reactively (IBM 2012 in Zook 2017). Local governments expect that data driven policy will create efficiency gains in a context of growing expenses for social policy (van Zoonen 2020). In this way, big (urban) data and algorithms are regarded as a new common good, representing objective and desirable ways of monitoring, measuring, and managing city life.

Yet, data driven policies in the social domain are increasingly criticized by scholars as well as NGO's. Criticism runs deep and ranges from concerns regarding privacy ('big brother is watching you') to critique geared towards the risk of hidden austerity measures with the use of big data tools. In the light of our paper, we highlight three concerns that deal with the use of big data in general and with big data in social policy more specifically. Below we describe the politics of big urban data, technocratic governance, and (a lack of) citizen involvement.

Firstly, the politics of (big) data. Kersing et al. (2022), following Pederson (2019), give an account on digital welfare state practices, and describe how so-called 'dataïsts' believe that decisions should be made on the basis of big data and algorithms because this supposedly erases human judgement and personal prejudice. The idea is that big data enables automated, a-political, and objective decision-making as opposed to human decision-making, which will moreover erase human errors in decision-making (Halpern et al. 2017). However, as various scholars have shown, there is no such thing as value-free or neutral data (Haraway 1988; Harding; 1986; Bowker and Star 1999; Latour 1987). Data are always situated, the result of choices and con-

straints and are therefore contingent and contain politics (D'Ignazio et al. 2020; Kitchin 2014). Therefore, the idea that algorithms provide impartial and objective input for decision-making is a '*carefully crafted fiction*' (Gillespie 2014). In the context of data-driven and algorithmic governance in the United States for example, Eubanks (2019) points out that while analytic models are useful because they focus only on what is vital to predicted outcomes, they are also merely abstractions. That means that decisions on the incorporation of information reflect the priorities and concerns of their creators. In the same vein, O'Neill (2017) argues that '*models are opinions embedded in mathematics*' and are hence socially and culturally laden and less objective than presented to be. Moreover, by their very enactments, big data and related (predictive) analytics create realities just as much as they record them (Rouvroy et al. 2013: 25) and thereby, in the context of cities, constitute what counts as an urban issue – and even define what cities are (Zook 2017).

Building on this critique, secondly, the idea that all city aspects can be measured and monitored, shows a rather techno-optimistic tendency. This relates to the assumption that the use of data will make existing services run more efficiently. Based on positivistic approaches, dataïsts for example claim that when data is analysed objectively, real world complexities can be converted into rational and ordered forms of knowledge (Iliadis et al. 2016; Kitchin et al. 2016 in Kersing et al. 2022). This technocratic, depoliticized approach however leaves out the wider political economic context and therefore fails to address deeply rooted structural urban problems. Therefore, these approaches can only operate within the existing policy and practices and does not allow for any structural change. Within technocratic approaches there is little or no political discussion about the impacts of systems of predictive analytics, even though they are used as tools for human and social services across the country at a breath-taking pace. The opaque and black boxed character of data and algorithms prevents political discussion of their use and impact as governance tools (Kitchin 2017; Eubanks 2019).

A third and last concern we highlight concerns the lack of citizen involvement. The smart city imaginary envisions a bottom-up involvement of citizens in which economic growth and competitiveness allow for creative and entrepreneurial citizens who work in new collaborations, consortia, and partnerships, focused on the creation of data-driven urban governance projects (Shelton et al. 2014). The literature on smart urbanism emphasizes the use of hackathons, urban laboratories, and innovation hubs for smart city development, showcasing their innovative potential and data driven futures (Karvonen et al. 2014; 2018; van Zoonen 2020). However, although these spaces of innovation are often attributed with democratic tendencies, many civic participants do have a technical background (Shelton et al. 2014). In this regard Rahmawan-Huizenga et al. (2022) show that inclusive participation in urban experiments by citizens from different backgrounds remains rather limited. Currently, the digital welfare state lacks an involvement of – especially vulnerable– citizens that use social policy (Kersing et al. forthcoming; Oldenhof et al. forthcoming). In this context Jorgensen (2023) calls for a human-centric approach of the digital welfare state, in order not to treat citizens as data points but instead as individuals containing agency and rights. Hence, there is a continuous search for more inclusive participation opportunities.

In this paper we spotlight the search for socially just data-driven urban youth policy by analysing an experiment aimed at incorporating the user perspective in designing a data-driven tool. We connect the academic attention regarding the smart city and digital welfare state – as possible sites of innovation – to the increasing amount of scholarly and policy attention towards 'democratic innovations'. This might provide handholds for citizen involvement and democratic policy making.

The term democratic innovation has been used in reference to a wide variety of democratic reforms that aim to strengthen the role of citizens by providing them with more opportunities to participate in and influence decision-making besides voting in elections (e.g. Cain et al, 2003; Warren, 2003; Smith, 2009; Michels, 2011; Geissel and Newton, 2012; Geissel and Joas, 2013, Denters et al. 2020). In this context we draw attention to a current trend that raises high expectations in this regard, which is incorporating *design thinking* in policy making, especially in public innovation labs (McGann et al 2018) such as our case study.

Design thinking has been translated from design studies to management (Johansson-Skoldberg et al 2013, Bate & Robert 2006) and public policy (McGann et al. 2018, Mintrom et al. 2016). In case of the latter the literature does not only emphasize the potential for innovation of design thinking, but also for democratizing policy making (ibid.). Similar as with definitions around smart urbanism and smart cities however, what design thinking is, is not clear cut and depends on the way it is translated in concrete practices (Johansson-Skoldberg et al 2013). Lewis et al. (2020: 112) explain design thinking as "*a 'bottom-up' approach where the gap between [policy] designers and citizens is narrowed through decisions being informed by those who are affected*". This means that one of the central claims of design thinking is that it puts the user perspective at its core, potentially putting citizens centre stage and democratizing policy making. It is portrayed as a human-centred approach which values collaboration between practitioners, designers, clients, and researchers, places an emphasis on situated and creative thinking. Moreover, this approach highlights the importance of (re)conceptualizing wicked societal problems into organizational opportunities (Brown, 2008; Martin, 2009; Felder et al. 2023).

Using design thinking within smart urban governance for social policy might offer possibilities for democratizing the digital welfare state and thinking outside of the box for policy solutions. Incorporating design-thinking in the construction of a data-driven tool could possibly also address the other concerns within smart city criticism we highlighted above. By incorporating the experiences of actual youth care users, the tool could be designed to reflect more than merely the concerns of a top-down steering discourse, and in this way, become less of a technocratic tool in an algorithmic governance toolbox. Currently however, we lack empirical insight into how design thinking is translated into social policy making and therefore into its democratic potential. Therefore, it is 'not yet clear who actually participates in the decision thinking process' (Minstrom et al 2016, p 393) and what methods are used to incorporate the perspective of users, including marginalized groups and to what consequences. We will take up these questions as part of an empirical analysis of an 'actually existing' smart city project (Shelton et al. 2014).

Method

In line with Kitchin (2017) we scrutinized the ways in which a data driven tool for urban youth policy was experimentally brought into being, that is, how it was imagined, narrated, understood, and promoted by its makers, thereby 'unpacking the full socio-technical assemblage of algorithms'. Hereto, we conducted a multi-sited ethnography (Willis et al 2000). From January 2019 until March 2023, we followed an experimental set-up aimed at designing a predictive algorithm for youth care. By ethnographically following this experiment we aimed to study a data-driven project from the ground up, to find out what it does in the context of urban youth care, observing a socio-technical assemblage in the making.

In order to be up close, the first author offered to make minutes of meetings, assisting in practical ways, and offering reflection from an 'outsider' perspective. We joined them in their preparatory work, their internal brainstorm sessions, the co-creation meetings they organized with different field partners including youth care providers, municipal policy makers and public health workers (+ 20 meetings / +60 hours). After each project meeting, the first author reflected informally on each session. In 2022 formal semi-structured interviews were held with key actors (8) in this cooperative venture. Last, we discursively analysed relevant (policy) documents such as vision documents, project plans.

Our observations started with a broad interest into the socio-technical assemblage of predictive analytics in the making. After a few observation and informal interviews, we inductively teased out the topics (1) *incorporating the voice of youth care users*, (2) *systemic problems within youth care* and (3) *experimental set-up* as sensitising concepts (Bowen, 2006) informing our analysis. Observations were written down in field notes and interviews transcribed verbatim. All data were analysed using Atlas.ti software. The topics were discussed at length among the four authors. After the initial phase described above, all data were coded abductively, resulting in the analysis below.

Context: an experimental set–up

In 2015 in the Netherlands, the social domain which includes youth care was decentralized from the national to the local level, making the municipalities responsible for youth care. Municipalities faced two challenges; the organization of youth care was not only unfamiliar terrain, but they also had to organize it with less budget then was allocated to the domain of youth care before the decentralization. To deal with these challenges, municipalities increasingly turn towards innovation as a solution for providing care as efficiently as possible. In this context – decentralization, austerity, efficiency – creative companies emerged as appealing partners for municipalities.

Workshop is an example of such a creative organization. Workshop is a group of designers, youth care professionals and philosophers, that presents itself as a creative, entrepreneurial, and idealistic group that operates outside of the bureaucracy of an individual organization. Their tantalizing ambition was 'to make youth care redundant' by designing innovative solutions for concrete problems that adolescents, parents, and their environment face in the urban context. Workshop rethinks existing problems and "*the nice thing about this method is that you get away from the everyday and that you can dream and experiment*" (Interview Workshop member, 2018). Workshop uses design-thinking as a way to collaborate with those for whom the innovation is intended – users of youth care –to put their perspective centre stage. By designing technological solutions together with users, they aim to prevent, shorten, or replace existing forms of youth care. Examples of previous innovations range from apps for handling emotions or to prevent debts, to a robot offering parenting support.

A data–driven journey

In 2018 Workshop got inspired by the promissory discourses of big data and started exploring the possibilities of data-driven innovation of urban youth policy. Their ambition was to design predictive analytics in order to prevent the need for youth care. They commenced their own journey into the world of data. While learning about (big) data uses, they connected with a municipality that was in the process of developing an analytical model for youth care. They became partners in 2019. Starting that same year different organization in the context of youth care were invited to participate. Eventually, actors representing youth care users such as youth care professionals, (public health) policy advisors and municipal civil servants embarked on a mission of developing a predictive analytical tool. The project included creative brainstorm sessions with all actors involved, costumer journeys with actual (former) youth care recipients, and the development of data model. At the end of 2020 it became clear that the project was hitting a wall. The argument was that the different knowledges that were gained during the process could not be neatly matched into the analytical model. In 2021 attempts were made to search for a shared path, but without luck. The municipality continued the data project without the other partners involved. In March 2023 a last meeting with all partners involved took place. The municipal data analysis was presented to the group, and the project was closed. The model would not be used in practice. Below we give an account of the project in the spirit of a journey, resembling the costumer-journeys that intended to democratize a data-driven tool for urban youth policy.

Part 1: Dreaming about data

> *"What if we were able to design a big data tool that allows us to find the pair of yellow pants?"*
> (Fieldnotes Workshop meeting, March 2019)

The metaphor of a pair of yellow pants was at the forefront of a new ambition in the portfolio of Workshop. Workshop members explained it as the pair of pants children get to wear after an accident of wetting themselves in day-care. This pair, they clarified, will often unintentionally make the child stand out, for example because they are too big. The pair of yellow pants is a metaphor for signalling visibility: an early warning sign indicating a possible need for (complex) youth care at a later stage in the life. Using data to find these early warning signs was the

newest aim of finding technological innovations in youth care.

As a first step Workshop members emerged themselves into the possibilities of predictive analytics by reaching out to others working with (big) data in the social domain. First, they enlisted the help of another Workshop chapter that had already developed a big data tool for the prevention of out of home placements of children. This Workshop chapter designed a predictive tool in the form of a board game that supports decision-making regarding youth care trajectories. This tool claims to offer youth care workers an extra set of (objective) eyes in the context of risk assessment. In the words of one member the tool could "*be used as a decision support tool for care providers for an objective risk assessment in addition to a professional own analysis during intake*" (Interview Workshop member October 2018) At the same time, Workshop members participated in a "data lab" in which a big data consultant enthusiastically initiated participants into the promissory possibilities of big data for solving issues within the social domain. By taking up the subject of child abuse, participants were taught the possibilities (big) data and corresponding analytics had to offer.

Noticeably, a common refrain within these learning environments was the idea that '*the world is predictable*' (Field note observation May 2019) as long as you have enough information, you know which question to ask, and you know which analytical method to use. Here, we recognize elements of modernist, instrumentalist, and pragmatist big data discourses (Stevens et al. 2018) that offer promissory perspectives of knowing better and more objective, neutral, and efficient decision-making.

Enticed and hopeful about these promises, workshop members designed *alternative* data- driven work (Shelton et al. 2014: 18). They aspired to develop a data tool for the prevention of youth care in an inclusive way, by bringing in the voice of actual youth care users. Hereto they planned to conduct so-called costumer journeys. This meant drawing a timeline on a large piece of paper together with youth care users –parents in this case – paying specific attention to important, difficult, and supportive events during a specific time period, giving voice to parents' own vision and recommendations regarding the youth care trajectory:

> *"It means that we talk to customers such as young people, the elderly, and children about what they are experiencing on specific themes (whether it is about social skills or about education or about finances) and then you actually look at what people are facing now and what are they satisfied with"*
> (Interview Workshop member 2018)

Hereby, Workshop members intended to design a democratic data tool, thereby creating more just urban policies. Putting the user perspective central, the members believed they could disclose information that had not yet been revealed by existing quantitative analyses. The idea was to capture qualitative information that could be found only by delving into actual client experiences and transform it into quantitative data that allows for statistical analysis. By taking on the user perspective they anticipated enhancing prediction, and hence, prevention of youth care.

Part 2: Prevention

'We are doing it for the inner-city kids' (Field notes observation 2019).

Above we read a frequently expressed motivation essential to the project. Underlying the ambition to develop a predictive analytical tool we recognize a specific discourse on prevention. This is where Workshop members first found a connection with the municipality, as both parties problematized growing up in the context of issues regarding poverty, education and criminality which are especially prevalent in the urban context of this specific city in the Netherlands. To work on these issues the municipality too was finding out 'if and how they could do something with data within the social domain' of urban youth policy:

> *"With societal and institutional changes, there are challenges and opportunities for youth policy. Especially in a metropolitan context such as in our case. Because this city has more disadvantages than the rest of the Netherlands, the challenge is tough. In this City, the challenges are even tougher (than in the rest of the country, SH): because on the one hand, it has more potential with its young population, on the other hand, young people are nowhere as deprived as in this city. At the same time, the city's young population offers potential. To realize this potential, we are focusing on a rational foundation for growth with its youth policy framework The City Grows. With insights from both science and interaction with target groups, we want to contribute to the more promising, safer, and healthier growing up for children and adolescents in the city. For example, effective use is made of risk and protective factors and work is done on evidence-based innovation. Specific attention is paid to the role that the municipal government takes on. In this way, we are tackling the challenges of our time with its youth policy."*
> (Policy document Growing up in the city).

In this excerpt, we read how the municipality expresses the ambition to develop a rational (according to them, objective) foundation for urban youth policy, in co-creation with target groups (youth and youth care organizations) and knowledge institutes. To develop such a rational policy, the goal was to uncover risk and protective factors using quantitative data.

In this context, the municipality and Workshop became ideal partners for collaborative experimentation. In their opinion a lot of harm could be circumvented if only the children 'at risk' would become visible sooner. Within the experimental set-up participants explored possibilities of using data for '*the early identification of the need for (complex) care in toddlers and pre-schoolers in such a way that timely interventions could be made*' (Workshop start document 2019). In this exact context, the municipality was already developing a so-called factor-model that would provide:

> *"(…) insight into the complexity of and the relationship between the various factors that influence growing up and living healthy, promising, and safe. These factors can have both positive and negative influences. Think of factors such as poverty and work/education, upbringing, living environment, stress, and language development. These are important factors and connections between them are clearly reflected in the model. We can then use the model to optimize the (youth care/social) system and have more impact."* (Municipal youth care, policy document)

Although this model was being used as an example of innovating youth care, delving into it learned that the model was not yet 'filled' with actual data. Instead, it was primarily literature based. Hence, the experimental collaboration offered the municipal policy advisors a way to supplement their model with data in order to become an actual analytical tool. One municipal policy advisor explained that despite their responsibility for youth care, they did not own data from actual youth care trajectories. In order to conduct predictive analytics therefore, they needed data from youth care organizations, for which they needed the participation of different youth care organizations, calling it '*a shared interest*'.

To this end, many co-creative sessions between '*practice, policy and science*', that is, participants from public health and youth care together with the municipality and Workshop would take place over the course of a year and a half. In these meetings participants discussed problems they encountered, with the aim to gather new factors that drive the demand for youth care. These sessions attempted bringing together information from different perspectives in a bottom-up way. According to Workshop added it was specifically this bottom-up method that characterized the added value of their design-thinking approach. Workshop members added actual user perspectives by bringing in information directly from users through costumer journeys, while youth care professionals spoke on behalf of youth care users through their experiences in working with them. As a result of these sessions, they created a long list of early warning signals that could influence the need for complex youth care, which could be integrated into the factor-model.

Part 3: Complexity

The projects' focus was steered towards prevention of youth care, specifically 'complex' youth care. However, what the term complex exactly meant in this context was not clear. In January 2020 this issue was taken up in one of the co-creation sessions. During this session complex care was broadly defined as (1) a problem that runs through multiple areas of life; (2) a combination of problems within the child itself, the parents, or the neighbourhood; (3) parents who do not recognize the need for help; (4) or a situation in which the (multiple) demands of a child or family do not match the existing offer of youth care.

The latter definition actually constructed the issue of the demand and supply of youth care as a being complex. A discussion emerged about the perspective from which complexity is experienced. In this context, some participants asked: "*for whom is the need for youth care complex, is that for the professional, for the child, or for the parent?*".
Participants agreed that in many instances it is the system of youth care that is lacking and not able to meet the needs of children and parents.

Interestingly, the question of what complexity means, was never discussed with actual youth care users. Hence, complexity was perceived as a systemic problem by professionals and policy-advisors. Ultimately, for the factor-model it was a data-scientist who decided on the definition of complex care. Because there was no other way to measure complex youth care and in order to fit the model, it became defined quantitatively, as the amount of youth care trajectories a family (simultaneously) received (two trajectories at the same time signifying complexity).

Part 4: The client center stage

> *"We listen to parents because they know from their own experience what works well and what could be improved in the care for their children, or the children of the future. We want to reflect with parents on their experience regarding their pregnancy, giving birth, baby time, toddler age, etcetera. We listen to the stories parents have about how and when they needed extra care for their child".*
> (Invitation letter costumer journeys, November 2019).

To find out about the user experience – parents in this case –Workshop members conducted costumer journeys. Above we read a quote from the invitation letter for these journeys, aimed at parents who were already familiar with youth care. The quote reveals the expectation that the voice of users would generate important insights that could be translated into factors contributing to developing the tool for predictive analytics. Costumer journeys meant drawing a timeline on a large sheet and write down important, difficult, and supportive events that are brought in by users, giving insight in youth care experiences through parents' own answers and recommendations (see figure 1). Below we share two relevant insights obtained from these journeys.

Firstly, several parents explained how the quality of the relationship with the youth care professional, or the way they were treated by them, influenced the complexity of the situation. Being treated respectfully, they felt, resulted in a cooperative relationship. On the contrary, not being taken seriously led parents to distrust professional and obstructed cooperation. This in turn could result in an increasing (parenting) problem and turn a rather simple question into a more complicated trajectory.

Building on that, secondly, parents argued that often an incident had to take place in order for a trajectory to finally start. Several parents explained that they had been asking for help for some time, but only got (the right kind of) of support after an incident had occurred. In these instances, the development of a 'complex care need' was not so much the result of an actual complex need, but instead resulted from not having been heard earlier. Parents argued that not getting (the right) help in time resulted in accumulation and aggravation of the problems or the parenting situation. Hence, having to wait for help turned a singular need for youth care into a more complex need for help.

Crucially, this information was interpreted as so-called process factors. They reveal that for parents, things like the relationship with professionals and time spent waiting influenced their need for care. This information reveals something about the system of youth care, instead of revealing *individual* traits of children or parents. Moreover, these insights do not add anything to a statistical model that aims to assess protective and risk factors as predictors for youth care but require a different approach.

Part 5: Disruption

The next step of the journey was to incorporate the new information into the municipal 'factor-model'; it was time to 'fill' the predictive model. As it turned out however, most of the information found through the costumer journeys and gathered through the co-creation session could be regarded as process-factors. At this point it was said that this information could not be translated into quantitative data or into an algorithmic model:

> *"There are a lot of footnotes to make because we don't have a lot of data at all. We don't have data on parenting quality or anything or on, uh, social-emotional health of children. We just don't have that."*
> (Interview municipal policy advisor, December 2022).

For example, information on trust in youth care (and the government), previous negative experience with school or youth care and being on a long waiting list, was either not measured, could not be translated into a quantitative indicator, or simply need to be resolved otherwise. Hence, it meant that the ambition to incorporate information gathered through costumer journeys and co-creation sessions into a model for data analysis, simply could not be done. As a result of different complications such as privacy, incompatibility, and a lack of data, the list of factors that participants had drawn up, had to be revised.

> *"This list should definitely be updated because there were already a number of factors of which we now know that they are now not quantifiable, or rather, not linkable to the CBS dataset."*
> (Interview municipal policy advisor, December 2022).

Consequently, the project could not deliver developing the predictive algorithmic model as it had intended to do. In this context "*The words 'real' research and 'hard data' are mentioned to show a distinction with the soft side of the customer journeys*" (field notes observation meeting October 2020). Looking back on the project in an interview though, this municipal policy advisor acknowledged that the model had not been developed as intended but nevertheless they did gain important lessons:

> *"Well, we are still a long way from what can be done with data. So that there are indeed many factors, process factors and such that play a role in developing a need for youth care, but you cannot capture these in (quantitative S.H.) data. Maybe that is what we actually learned here."*
> (Interview policy advisor, December 2022).

At this point in time in the data-driven journey, the project experienced a disruption. It was clear that both costumer journeys and co-creation sessions generated insights that could not easily be used for statistical analysis. Hence, the data driven journey rescheduled its itinerary. The municipality would continue to work on their quantitative data analysis by elaborating and substantiating their factor-model. They would continue building their algorithm without Workshop or other partners. This meant focusing on finding indicators that, according to the literature, could signal problems within the individual child or family and leaving out information related to the process of youth care or signalling problems within the youth care system.

Reflecting on the disruption, two Workshop members explained:

> *"Looking back, I have to admit that it was rather naïve to think that these two different types of knowledge production could have been brought together, couldn't we have known this immediately?*
> (Informal interview members Workshop, October 2020)

Although Workshop felt their costumer journey did add to understanding the need for youth care, it became clear that the project came to a halt before it reached its destination.

Nevertheless, the quantitative path neither reached its initial destination. It was now clear that not only the ambition of bringing together of two types of knowledge production – translating user information into quantitative data– but also the intended form of analysis – predictive analysis – could not be met. Despite the initial title of the project 'Early Predictors' the actual analysis became an explanatory one, based on only municipal data, health data and micro data, such as the number of parents and children in a family, date of birth, country of birth, type of income, education, use of youth care, birthweight, and healthcare costs. During a concluding meeting in March 2023 some participants asked about the decisions that were made regarding the variables that were included in the analysis. According to the data analyst the predictive analysis could not be executed because they did not have the right data for a predictive analysis, such as data from Public Health or data from youth care providers. During an interview, a municipal policy advisor moreover pointed to the fact that previous (governmental) predictive analytics received bad attention which they did not wish to repeat. A last argument for redirecting the analysis from predicting to explaining, it was argued, was because explanatory analyses aim to identify risk and protective factors that are causally related to an outcome, in this case the need for complex youth care. Such explanatory analysis would inform and improve literature-based existing screening models. This was regarded as a sufficient outcome of the project and therefore the ambition for prediction was let go.

Part 6: Moving on

In 2023 the project came to an end. The results presented in a final meeting with all participants were not surprising. Only a few variables exhibited a significant relation with complex youth care. Among them were variables such as debts, non-payments of healthcare costs, receiving welfare, having been in contact with the law. Moreover, there were serious footnotes concerning the quality of the analysis, the data-scientist explained, the biggest shortcoming being a lack of available data. For this reason, the project was not going to be implemented and was not given any (public) attention outside of the realm of direct participants.

Interestingly however, the lessons from the analysis did inform a new project. In two last interviews with a municipal policy advisor and a Workshop member, we reflected on the Early Predictors project and looked ahead to a new project on the data horizon:

"Advisor: And that in itself is a nice follow-up because we also notice that all the previous analyses, or at least the preparation for them, have been very instructive. So, we simply share those learnings with the new project group". Interviewer: Can I actually see this new project as a follow-up of the project Early Predictors project I have been observing? Advisor: Yes, it is actually a new sequel, just as we have elaborated on previous analyses for this Early Predictor collaboration".
(Interview policy advisor municipality December 2022).

Here, we read a reflection on a new data project in which forces were joined with other municipal (health care) actors to focus on predictive analytics, mapping factors to predict whether children will grow up with healthy opportunities. Asking about this project, it was explained that the Early Predictors project was not regarded a failure, although it did not deliver what it intended to. On the contrary it was felt that the lessons learned could be used for their new project. Moreover, the new project was presented as a sequel, not only of the Early Predictors project, but also that of data projects from before that time.

In a way, all these projects are mere prototypes that mainly reveal an enthusiasm for data-driven promises. Both the dream of predictive analytics and the factor-model exhibit a future-oriented trend, always aimed at the next project on the data-driven horizon. Although initially Intended as a model designed around youth care, the factor-model was now taken up to encompass the entire social domain:

"The factor-model forms the basis for the (further) development of all components of the cities social support and youth care system. The model was initially developed for youth as the target group but is now being further developed to function for all ages and target groups". (Policy document).

For example, in October 2022 I encountered the model in a meeting regarding urban youth and poverty. Here, a municipal policy advisor explaining how the model contained data from poverty, criminality, health, work amongst other things and could be used to find out which interventions work in the social domain. However, as he continued it became clear that the model was currently substantiated only by academic literature and was still in the process of being 'refined'. It shows that the worth of the factor-model did not revolve around being able to predict or explain outcomes on the basis of actual municipal data analysis. Instead, it served mainly as a rhetoric device, a prototype sketching out a horizon of yet new futures.

Discussion

Our paper gives an empirical account of a digital welfare state experiment within urban youth policy. We scrutinized the ways in which a data-driven tool for youth policy was experimentally brought into being, that is, how it was imagined, narrated, understood, and promoted by its makers, asking: "*How did the experimental set-up of putting the experience of youth care users center stage allow for the co-construction of a data-driven tool for urban youth policy?*"

Concluding, we highlight that the experiment shows many similarities with common big data criticism (D'Ignazio et al. 2020; Eubanks 2019; Gillespie 2014; Iliadis et al. 2016; Jorgensen 2023; Kersing et al. 2022; Kitchin 2014; O'Neill 2017; Rouvroy et al. 2013; Shelton et al. 2014; van Zoonen 2020; Zook 2017). We show that designing data-driven policy: 1) did not deliver on its promise of constructing a predictive tool and did not deliver on its promise of including voices of youth care recipients, 2) emphasized individual traits and thereby obfuscated systemic problems within youth care and 3) revealed a reproductive logic of prototyping, which made that failure was not seen as problematic as the prototype is always focused on new experiments and futures.

Firstly, we show that the experiences of youth care recipients, voiced through costumer journeys and actors representing youth care users, eventually were not incorporated into the data model despite promises of inclusivity. Experiences by actual users and professionals generally gave information about the process or about the system in which youth care operates, such as 'trust in the government, 'the relationship between care recipients and professionals' or 'a previous negative experience regarding youth care', instead of revealing *individual* traits of children or parents. However, this information was either never measured or, if measured, could not (easily) be translated into a data model to assess protective and risk factors as predictors for youth care. Instead, these issues ask for a different solution then data analysis for prevention. Hence, the newly found information on youth care experiences was regarded as being incompatible with the municipal data model and therefore not integrated, abandoning its democratic promises.

Moreover, this shows that the construction of the factor-model was neither objective nor a-political. By referring to the technical impossibility of translating user experiences into statistical data, a choice was made about *what* and especially also about *whose* information was regarded as data. Sometimes, these choices were presented as merely pragmatic (as in the case with operationalizing complex care) and sometimes as inevitable because data was assumed to be lacking (although youth care organizations do hold information, for example about client satisfaction, that could serve as a proxy for user experiences). Likewise, the promise of prediction – of finding the pair of yellow pants – was not met. Insufficient and incompatible data was said to constrain the construction of such an algorithm.

Secondly, we show that the ambition of creating an analytical model focused attention towards the model as an issue of concern, and obscured thinking about solving (systematic) issues within youth care. An emphasis on individuals was made at the expense of the systemic structure and wider sociopolitical context. Challenges regarding childrearing and youth were individualized by merely searching for individual traits as causes for complex care. Pressing issues in this particular urban context such as increasing poverty and health inequalities, were left out of the analysis. Moreover, issues such as long waiting list, a mismatch between demand and supply of care, and the relationship between users and professionals were discussed within the experiment, but never as issues to be solved. For example, waiting lists have grown and the quality of the relationship between recipients and professionals is under pressure, because

of an increasing demand of youth care and a lack of youth care workers. These issues are even more urgent after the decentralization of youth care in 2015, when municipalities had to take on this responsibility with less budget than allocated to this domain before. Nevertheless, the consequences of the decentralization and corresponding budget cuts and problems within the system of youth care itself, lingered in silence in the background of the experiment.

Thirdly, in line with Halpern et al. (2017) we illuminate how the experimental set-up exhibited a reproductive logic of prototyping the digital welfare state. Our analysis shows that ultimately the experiment served as a prototype sketching out a horizon of yet new experiments and other possible futures. Because of this logic the work is focused on the experiment itself and focused on new experiments and different futures. Therefore, the disruption was not regarded as a failure. In the same way, actual pressing issues within youth care, as articulated by users and professionals, were not properly addressed. Consequently, this data-driven dream attached actors to a (rather naïve) promise of preventing the need for youth care in cruel optimistic ways (Berlant 2016), as its promise were evidently out of reach.

As many cities around the world are experimenting with the 'digital welfare state' we offer three implications for this agenda. Importantly, we argue that policymakers need to assess the appropriateness of a data-driven solution. Many issues related to the broader socio-political system of youth care, such as long waiting lists, do not benefit from statistical analysis but merely need to be acknowledged and addressed practically. Moreover, when a data-driven solution is appropriate, effort should be focused on acquiring or developing data regarding systemic or process factors instead of solely focusing on individual (risk) factors at hand. Finally, we argue that there are other ways to involve citizens besides involving them in the construction of a data-tool. In line with Lipp et al. 2023, we show that engaging end users in co-creation of democratic innovations is limited and even more that involvement does not necessarily mean that user experiences eventually 'trickle down' into the design. In this context, data-dialogues with citizens receiving welfare benefits offer an interesting example of an experiment that aims to both educate citizens in data-literacy and offers democratic potential by facilitating feedback on the data-driven practice within welfare benefits.

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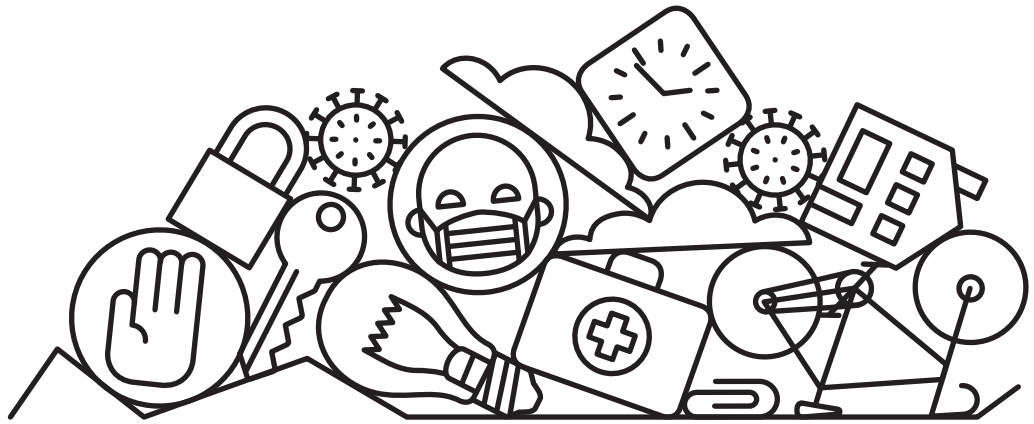
Chapter 6
The Pandemic City



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Introduction

The first two years of the COVID-19 pandemic have been characterised as a crisis (Lupton, 2022). The literature on crisis management generally emphasises the need for urgent decision-making and remedial action under conditions of high uncertainty, in both a normative and epistemic sense (Boin et al., 2016; Evans, 2021; Parviainen et al., 2021). One of the defining components of crises then, is the idea that time is 'at a premium' (Boin et al., 2020). However, there is much that we do not know about the role that time plays in governing crises.

Decision-making in times of crisis is often an inscrutable process. Publicly, politicians and other decision-makers usually present decisions as the outcome of a rational process, obscuring that decision-making is often highly politicised and involves normative choices (Stone, 2012). During the COVID-19 pandemic, such choices concerned value trade-offs, for example between preventing the spread of infection and social safety and wellbeing (Lupton, 2022; van Bochove et al., 2022), and between rapid decision- making and democratic legitimacy (Parry et al., 2021).

In our analysis below we focus on the ways in which different *timeframes* influence processes of pandemic decision-making. Taking inspiration from Heyman (2010), we understand timeframes as the enactment of a specific temporal structure that results in specific modes of governance and bring specific actions, risks and values into being. By focusing on these timeframes and their effects, we respond to recent calls to incorporate timeframes and temporalities into COVID-19 research (Brown, 2020; Jarvis, 2021a, 2021b) in order to scrutinise how timeframes influence value trade-offs, and which values are *bracketed off or looked past* (Brown, 2020).

Social science research into COVID-19 policy and management is currently burgeoning (e.g. Alaszewski, 2021a; 2021b; Bal et al., 2020; De Graaff et al., 2021; Lupton, 2022; Suckert, 2021; van Bochove et al., 2022; Zinn, 2020), contributing to what Brown and Zinn (2021) coin *a new sociology of pandemics*. Some of these studies also focus on time, for example showing how the media constructed the crisis using different time narratives (Jarvis, 2021a, 2021b). None, to our knowledge, have examined how timeframes influence important decision-making fora in their daily practices.

Our study opens up the black box of decision-making and scrutinises decision- makers up close. We analyse decision-making in an important forum in the Netherlands: the regional safety authority[18], the body responsible for regional crisis and disaster management, including major outbreaks of infectious diseases. COVID-19 was declared as a major incident because the impact of the virus was defined as having 'more than local significance', resulting in the need for coordination and a mandate regarding the implementation and execution of COVID-19 measures across municipalities. Consequently, decision-making power was transferred to the regional safety authority (see later for more context). Our analysis is based on an ethnographic case study for which we conducted 180+ hours of observations of crisis and other meetings and

[18] Regional safety authority is a translation from the Dutch 'Veiligheidsregio'.

16 semi-structured interviews with respondents from one regional safety authority in an urban area in the Netherlands. Foregrounding our analysis of governing the pandemic we were guided by the following question: *'Which timeframes feature in decision-making on COVID-19 and how do they steer action, risk and values in governing the pandemic?'*

The decision to foreground time was both theoretically and empirically informed. In our research we noticed very early on that the framing of time was of utmost importance within decision-making in different ways. We identified three timeframes in our results: the 'no time to waste' frame, the 'taking the time' frame and the 'future time' frame. These three timeframes are formed by – while simultaneously forming – a specific composition of (1) patterns of action (2) objects at risk, and (3) values that are fore- grounded. Before presenting our findings, we situate the article's theoretical underpinnings and methods, followed by a discussion of the entanglements between different timeframes and their consequences for health risk governance. We end the article with a brief conclusion.

Framing time

Time 'does not exist outside action and interpretation'. This interpretation of time acts as a constitutive force that shapes decision-making through framing time in a specific way (Daipha, 2015, p. 203). Seen this way time is not a mere background variable, but instead is both constructed and a constituting force (Adam, 1990; Brown et al., 2013; Elias & van den Bergh, 1985; Giddens, 1984; Nowotny, 1992; Orlikowski & Yates, 2002) in and of decision-making. In this article we analyse how health risk governance is influenced by the framing of time.

To analyse timeframes within COVID-19 health risk governance, we build on literature on interpretative policy analysis approaches with a focus on framing. This literature offers insights into how framing time has consequences for practical action that is undertaken, for the object at risk that is brought into being and for the values that are foregrounded or ignored within decision-making. Hereto, we draw on framing studies focusing on organisations (Orlikowski & Gash, 1994) and the framing of policy controversies (Rein & Schön, 1993; Stone, 2012). This is our analytical angle for the construction of timeframes in crisis decision-making.

Originating in social cognitive research and symbolic interactionism, the framing literature argues that people align their actions with their reading of a situation. By enacting social reality and giving it meaning, people are also constructing it (Berger & Luckman, 1989 [1966]). Orlikowski and Gash (1994) use the term frame in this context to refer to the ways in which actors in organisations make sense of and give meaning to their work. Containing assumptions, expectations, and knowledge, symbolically articulated through metaphors, stories and visual imagery, a frame includes both a specifically formulated (policy) problem and its solution. A frame also defines boundaries, high- lighting some parts while simultaneously obscuring others (Stone, 2012, p. 252). Frames therefore guide actors (implicitly) into sense-making and action; they both enable and constrain action, thereby reducing the complexity of social issues to a more structured and less ambiguous reality.

Through the practice of framing, actors choose to foreground or ignore specific aspects of a controversy or problem, turning them into a coherent storyline (Rein & Schön, 1993; Stone, 2012). Doing so gives rise to a specific frame that in turn appears as an objective reality to which actors must respond, highlighting the importance of framing as a discursive practice. For example, framing a situation such as the refugee crisis as 'a tsunami', as is done by certain political parties and certain media outlets, steers action towards specific 'inevitable' solutions, such as measures aimed at 'pushing back' people looking for refuge.

While decision-making naturally deals with external time pressure, it is simultaneously involved in the construction of particular temporalities (Barbehön, 2022). The interactive process of framing can present specific timeframes as an external social reality in need of a specific response. Creating a sense of urgency, for example – the compression of time – can be strategically negotiated by actors to enforce quick decision- making (Boin et al., 2016; 2020).
For the purpose of this paper, we are not only interested in studying how actors construct timeframes, but also aim to understand how these frames foreground certain courses of action, objects of risk and values at the cost of others.

Firstly, the way frames matter for practical action is nicely illustrated by Sager and Zuiderent-Jerak (2021), who address the constitutive force of time for decision-making within evidence-based medicine. These authors show how clinical outcomes are central to evidence-based medicine, but their prioritisation and decision-making depends upon the temporality of the relevant evidence. In their case, mobilising different temporal orderings results in different understandings of clinical outcomes and in different clinical actions being proposed when qualifying patients for an ICD (implantable cardioverter defibrillator). For example, by invoking biological versus chronological time, different trajectories for ICD procedures were suggested. Not only age but also the futures the procedure would produce for the individual patient at risk and for the sustainability of the health system within the region, proved to be of significance for decision-making.

Secondly, and in a similar vein, the object at risk does not reflect an objective quality of the object itself but is instead constituted in a specific context or frame. Heyman et al. (2013) explain how 'a contingency will only become a risk if it involves outcomes which matter to the member of a particular social group' (p. 400). In this context Boholm and Corvellec (2011), following Hilgartner (1992), emphasise the relational and interpretative nature of risk. According to them there is *'a relationship of risk between a risk object and an object at risk, so that the risk object is considered, under certain contingent circumstances and in some causal way, to threaten the valued object at risk' (*Boholm & Corvellec, 2011, p. 176). This means that an object – not necessarily a material object but also a social or cultural phenomenon – becomes seen as vulnerable and 'at risk' if it is of importance within a cultural frame and therefore needs to be cared for or protected. For example, in the aforementioned 'refugee crisis' example, different objects at risk are at play which are closely related to the performed action: preventing migrants to cross the sea means that not the people fleeing from their country, but the European borders are seen as the object at risk in need of protection. Hence, risk is constituted through a specific relationship between

actors and objects and the way these relationships are valued and evaluated (Boholm & Corvellec, 2011).

The third and last element important for our analysis, values, are located in the 'thinking' (Heyman et al., 2013) and practices (Oldenhof et al., 2022) of social actors. As we argue in this article it is important to analyse how timeframes play a role in dealing with multiple or conflicting values. In this context, Triandafilidis et al. (2017), for example, show how temporal frames influence smoking behaviour in young adults as they argue that health risks related to smoking are associated with long-term smoking at a later stage in life. Therefore, perceived values such as fun and stress-relief, outweigh values such as good health at an older age. In short, different temporalities can lead to the valuing of one thing over another. This is important not only for individual health related values such as individual health risk of smoking, but also in the wider context of health risk governance. Hence, understanding timeframes and how they foreground certain elements over others requires us to include values in decision-making.

Finally, frames need not be singular; multiple frames can exist alongside one another, conflict with or complement one another (Behr et al., 2015). It is therefore important to discern both the different timeframes put forward in decision-making as well as their interactions. We do this in our case study below.

Context: public health and the Dutch regional safety authority

Besides governing acute (hospital) care, pandemic governance was a matter of governing (public health in) the public domain. As Wallenburg et al. (2022) and van de Bovenkamp et al. (2017) describe decision-making within the Dutch health care system is fragmented as a result of a layered and decentralised system. An example of this fragmentation is the division between health care (primary care and hospital care), social support, long- term care and public health, that each have their own laws, regulations, financial arrangement, decision-making structures and assigned authorities. In this article we focus exclusively on public health within the public domain.

In this context, the role of the regional safety authority in the Netherlands is paramount. The Netherlands is divided into 25 such regions[19]. The board of a regional safety authority consists of all mayors from cities within that region. One of these mayors, usually the mayor of the largest municipality, is appointed chairman. If a (threat of a) fire, disaster or crisis crosses the boundaries of municipal borders, the chairman of the regional safety authority becomes responsible instead of a municipal mayor. The regional safety authority is usually referred to as the 'general column' in opposition to the 'white column' of healthcare delivery and their most important tasks are (1) to prevent and fight fires, (2) preparing for risks, disasters and crises and (3) coordination, management and combating of disasters and crises, including major out- breaks of infectious disease (usually urgent and rapid crises, up until maximum 72 hours). Lastly, the Municipal Public Health Service (GGD) played an especially important role during the crisis in the Dutch context. Generally referred to as the 'white column', this authority is responsible for public health in the region and, under normal circumstances, for handling infectious diseases.[20]

[19] This division of 25 regions does not correspond with the administrative layer of 12 Dutch provinces, nor with the division of 10 regions for acute care delivery (ROAZ), adding to the fragmentation of the decision-making structure during the pandemic.

Methodology

We had the unique opportunity to do (mostly) on-site ethnographic research and watch the unfolding of COVID-19 decision-making from up close from March 2020 until June 2021. On 22 March 2020, the first author joined the Director of Public Health for the first time and was invited to observe two types of crisis meetings. First, the regional public health crisis-meetings that met twice a week. Within these meetings all public health related issues were discussed and actions were coordinated. Moreover, information was prepared for decision-making in the regional crisis meeting. We also conducted observations of these regional crisis meetings. Here decision-making took place regarding the implementation of both national measures and additional regional measures and other organisational and logistic work related to the prevention of the spreading of the virus. The regional crisis meeting took place every weekday. After the first two months of the pandemic frequencies were reduced and could vary per month, depending on the ebb and flow of the infection rates.

From March 2020 to July 2020, the first author spent about three days a week within the walls of the public health department and regional safety authority, where she observed and spoke informally with the actors working on governing the pandemic. It was in April 2020 that she met the scenario team, part of the regional safety authority. After initially observing a few scenario team meetings without participating, the first author was asked to participate because the team could use specific sociological input to the scenarios that were created. Hence, in this case of the scenario team, non-participant observations turned into participant observations. We were well aware of the ethics of this move towards participatory observations. However, the exceptional context of the pandemic and the importance of giving back to the field, that so generously allowed us to look behind doors that were closed to everybody else, made us accept their invitation. The first author participated by sharing sociological insights on the worst, realistic and best-case scenarios as they were drawn by the team itself. For example, the scenario-team (without interference of the first author) drafted up a worst-case scenario related to social unrest and riots as a possible, worst-case result of enduring corona measures such as (partial) lockdowns. Subsequently, the first author reflected with the team members on the created scenario, providing sociological reflections regarding possible causes of urban riots as described in the literature. In this way the first author reflected with the team on the bases of their own insights but had neither a leading nor steering role in determining topics or creating scenarios.

[20] The Director of Public Health (DPG) manages both the public health department (GGD) and the Medical Assistance Organization in the Region (GHOR) and, as responsible for the GHOR, is also a member of the management of the regional safety authority. Within this context, the Director of Public Health provides integral advice on behalf of the entire 'medical care chain' of acute, public, social, and long-term care.

In the end, the first author observed 66 regional crisis meetings, 22 local public health authority meetings and 26 scenario team meetings, in total more than 180 hours of meetings (see Table 1), and collected related documents, minutes and policy briefings that were instructive for understanding the meetings. When the first wave of the pandemic had subsided in June 2020, meetings and hence our observations reduced in frequency. In this relatively quiet period, we conducted semi-structured interviews (n = 16) with key figures from the crisis teams, including the director of Public Health and the Chairman of the regional safety authority, reflecting on our observations. When the second wave hit the Netherlands in the Autumn of 2020, we increased our observations again. After this second wave we presented our analysis on three separate occasions (in December 2020 and January 2021) to the various crisis teams to reflect on our findings with key participants, allowing us to validate our analysis.

Observations were documented in field notes and interviews transcribed verbatim. All data were analysed using Atlas.ti. The vignettes and quotes used in this paper have been translated from Dutch into English. Because each respondent in this case study has a unique job description, we do not disclose their positions. Although not all respondents have an equal position of power, they are all high-ranking administrators/ policymakers/directors who actively participate in decision-making. For analytical clarity, we choose to only differentiate between our respondents by referring to either the 'health' or 'general' column or the corresponding field sites: regional safety authority/general column, Public Health actors/white column and scenario team. In the same vein, we do not disclose every detail about certain examples, for privacy reasons.

We started our observations with a general inquiry into regional decision-making during a healthcare crisis. Throughout the process of collecting data, we employed an abductive approach. This means that we repeatedly scrutinised the gathered data and compared it to relevant theoretical concepts (for example 'the sociology of time' '(public) values' 'the sociology of risk and uncertainty', 'framing' and 'the sociology of decision-making') in order to analyse our findings. After a few weeks of observation and informal conversations, we inductively teased out the concept of *timeframes* as a sensitising concept (Bowen, 2006) as the framing of time played an important role in the language (metaphors, expressions, words and emotions) of many key-actors. We subsequently analysed time by specifically focusing on the use of metaphors for disasters and/or time. Many actors uttered expressions such as 'putting out the fire',

Overview data	**Observation (in hours)**	**Interviews**
Regional crisis meetings	83	7
Public Health crisis meetings	33	7
Scenarioteam crisis meetings	65	2
Total	181	16

Table 1. Overview data

'lacking time', 'getting ahead of time' and 'buying time' as well as other keywords, warfare vocabulary, emotions and pleas related to a perceived 'lack of time', 'taking the time' or 'the need to look beyond the here and now', and pleas for 'doing something yesterday rather than tomorrow', 'having to act now' and 'the need for longer-term perspective' and 'holding one's horses'. These codes were subsequently discussed at length among the four authors resulting in the interpretation of three different manners in which actors were 'doing' time or making use of time. After the initial phase described above, all data were coded again, resulting in the analysis of three timeframes. The data showed how the three different timeframes were constitutive of – and constructed by – a specific (1) pattern of action (2) object at risk, and (3) values.

Ethics

Our research has been positively assessed by the Research Ethics Review Committee of the Erasmus School of Health Policy & Management (20–08 Bal; 21–09 Bal). We obtained prior consent from the participants for observations and interviews and quotes have been approved by the relevant participants.

Findings

Timeframe I: No time to waste

> *Inside the room I sense tension. The infection rates have been rising. There is disagreement between the 'white' [health] and 'general' column about the need to build an emergency hospital unit and on the fast pace of action. One key respondent from the 'general column' briskly states that they are '. . . concerned, genuinely concerned. We work hard, we want to do even more if necessary. Tell us what it will take, tell us what you need, and we'll provide it.' He is fired up, and I sense a lot of agitation. Another actor from the general column takes over, agreeing with these concerns, stating that he too is angry and worried that they are not doing enough. Eventually he shouts, 'I don't want to find out, ten years from now, that I was playing in the Titanic's orchestra'. Later that evening, the decision to build a temporary hospital unit is made.* (Field notes from observation of regional crisis meeting, March 2020)

This vignette exemplifies our first timeframe: no time to waste. This frame focuses on governing the near future and is primarily employed by the 'general column', key actors responsible for public safety and crisis management who usually operate within the context of short and sudden disasters and who are used to acting swiftly and with rigour to get the job done quickly. The fragment above describes a key moment when a difficult decision had to be made regarding a dreaded lack of healthcare capacity. The debate mainly dealt with pace and timing. Most team members were pushing to set up a temporary location for COVID-19 patients 'today rather than tomorrow'. This was largely prompted by videos of Italian doctors and nurses warning other countries to prepare for the crisis by showing horrific images of patients dying in hospital corridors. Knowing that hospital capacity was limited in other regions of the Netherlands and lacking in their own, the team deemed the need for extra capacity in the near (and dystopian)

future as urgent. The proposed solution, to build a temporary emergency hospital unit, was the subject of heated debate, with emotionally charged arguments pushing for a quick decision and rapid construction of a unit able to accommodate almost 700 patients, including intensive care patients. After the decision was taken, the unit was constructed 'exceptionally quickly' according to those involved, within two and a half weeks, with construction crews working 24 × 7 to finish it. The unit was never used.

Within the no time to waste frame, action was defined by a focus on finding immediate solutions in the here and now, informed by possible near and dystopian futures. The condition of incomplete knowledge was handled by a display of force, decisiveness, and swiftness in decision-making. By framing the situation as 'it was on fire, it needed to be extinguished' (interview, June 2020), actors operated from the view that time and knowledge were constantly lacking. To heighten the sense of urgency and anticipate potentially threatening futures, respondents often discursively used firefighting and military metaphors ('war surgery' and 'peat fires') or made emotionally charged appeals during crisis meetings (a cri de Coeur or exclaiming that they were 'fed up'). Wanting to be 'better safe than sorry', decision-makers felt there was no time to lose and argued for decision-making to be done quickly.

This specific pattern of rapid and swift action, aligned with a focus on scarcity, logistics and disease control measures as objects at risk. For example, actors described the situation as a logistical crisis requiring an unconventional approach to redistributing scarcity and building infrastructures. To this end, officials promptly organised mass testing locations, hired extra medical and other staff, and rapidly and successfully resolved a lack of personal protective equipment, such as face masks. At times this resulted in bypassing regular decision-making and regulatory procedures because they were perceived as slowing down the process. For example, with regard to purchasing urgently needed personal protective equipment, a respondent explained:

> *Personal protective equipment needs to be purchased with the approval of the National Institute, but how long will approval before being allowed to purchase the equipment take? Well, it takes 14 days, so I say: well, I am not going to wait for that because in 14 days this batch (of personal protective equipment such as face masks) will be long sold to another buyer.'*
> (Interview with respondent from the regional safety authority, June 2020)

Instead of waiting for central procurement and regulatory procedures, the equipment was being purchased in unconventional ways. New partnerships emerged between official medical institutions and actors from the regional safety authority – outside of the regulatory alliances – to ensure the quality and safety of personal protective equipment.

The 'no time to waste' frame also foregrounded practices of strict enforcement of COVID-19 measures meant to prevent the virus's spread. Local restrictions were added on top of national measures. For example, local authorities severely curtailed the use of public spaces, such as market squares, parks, and children's playgrounds. Although the COVID-19 measures were drafted at national level, enforcement varied from one regional safety authority to another.

Each region could also impose extra, local measures, if necessary, for example closing off specific areas.

Concerns about public values such as education, the social lives of young people, child abuse and domestic violence were pushed to the background in favour of efforts to contain infection rates. In order not to lose sight of the goal (preventing infections), keeping focus was deemed essential. Keeping this focus meant that although the existence of multiple values at stake was acknowledged, these other values were regarded as conflicting and of less importance than keeping infection rates as low as possible:

> *And again that's why it often goes wrong in a crisis, because you want to serve all interests and that isn't possible. We had only one interest and that was keeping the virus from spreading through the region, that was fairly clear.* (Interview with respondent from the regional safety authority, June 2020).

In grappling with and making judgements about value conflicts (Kornberger et al., 2019), the value of safety was narrowly defined (limiting SARS-CoV-2 infections and preventing scarcity of medical equipment and deaths) and made a priority value, colonising decision-making. Interestingly, safety as a priority value was not only done in the context of preventing infections. Coming back to the vignette we started this paragraph with, the expression 'not wanting to find out having been playing in the Titanic's orchestra', shows that liability was also deemed important. However, liability was not so much a concern in the here and now within this frame but something that would be important in the future. Being 'better safe than sorry, meant that being responsible in the future about not having done enough, steered decision-making towards bold and fast action. Contrary to what might be expected, this frame did not significantly change over time during our research period between March 2020 until June 2021. However, next to the 'no time to waste' frame, other timeframes also played a role during the decision-making process.

Timeframe II: Taking the time

> *For that neighbourhood with its specific characteristics, you really want to know what is happening there with regards to the spread of the virus and the way people are responding to dealing with the virus, and what could then be effective interventions in such a place. But also, we first need to find out if what we think we know really is what there is to know? So, first of all, slow down and take notice: is what we think we know really true and why so?* (Interview with public health respondent, May 2020)

Parallel with the first timeframe, a second frame played a role during the meetings. This second frame of taking the time, focused on taking time to analyse underlying causes for puzzling situations and taking time to reflect on unintended side effects before acting. This frame was mainly put forward by public health actors, used to working in a context of diligence and carefulness. This frame was about staying in the here and now, and analogue to Haraway's staying with the trouble (Haraway 2016) we analyse it as a way of taking moral response-ability

by working in the present, with different actors, objects inflicted and affected by the pandemic, acknowledging that decision-making and responses will be difficult and imperfect. The quote above reveals how a public health team endeavoured to carefully analyse statistical differences in infection rates between urban districts, with some districts showing a much higher rate of infection than others. This deeper understanding was deemed essential because it would allow for situated policy responses instead of a one-size-fits-all approach. Examples include extra communication in certain districts to raise awareness of health risks, or keeping some public spaces open instead of closing them down because of a decline in wellbeing.

Practical action within this frame was characterised by carefulness. This resulted in a different relationship between incomplete knowledge and action in that actors took the time to examine, validate and reflect on the issues at hand to inform their decision- making. Contrary to the previous timeframe, key actors departing from this frame were motivated to learn more about the situation instead of acting purely on the basis of infection rates. Generally, and without denying the severity of the situation, this frame allowed for relative calm amid the cris de coeur. Actors used certain metaphors and expressions, such as 'just stop and learn' and wanting to 'dance with the virus', high- lighting the need to learn to deal with the pandemic and to let decisions depend on the specifics of the situation. They also frequently pleaded for 'slowing down' and 'a little more time' for analysis or, as illustrated by the opening quotation, expressed the need to perform 'deep dives' into the data. This somewhat calmer pace and deeper focus were considered essential within this frame, because 'getting things right' was deemed more important than 'getting things right now' Moleman et al. (2022).

The object at risk within this timeframe was steered towards health in a broader sense (than infection rates) and bringing the right care to the right place. For example, 'getting things right' resulted in taking the time to learn why infection rates differed between urban districts or across the city as a whole at certain points in time, instead of merely focussing on enforcement of measures within those areas:

> *X expresses the need for further analysis of the infection rates (of the city as a whole as compared to other cities in the country), because what these rates really mean is still a mystery. X explains the necessity of not rushing and jumping at the problem but instead of taking the time to delve a little deeper into the material to find out things in greater depth. The analysis of the numbers simply needs more focus, X argues repeatedly.* (Observation from regional crisis meeting, October 2020)

As a result, regional public health data analysts found that some areas showed a higher number of infections and higher levels of mobility (specifically, travel by car) during a lockdown. Combining mobility data with data about the types of jobs local residents had produced a more nuanced understanding of the higher infection rate. For example, it was found that many residents in these areas had jobs involving manual labour that generally could not be done from home. The need to work on site resulted in higher levels of mobility and more interaction with others, both at work and during commuting hours.

This deeper knowledge legitimised differentiation in policy responses, resulting in situated measures aimed at delivering the right response in the right place. For example, it led to neighbourhoods receiving targeted communication in several languages about the importance of testing, to cooperation with local key actors to encourage residents to get tested, and to extra testing facilities at targeted sites. Besides these situated responses, this deeper knowledge also resulted in higher infection rates being accepted as inevitable in particular districts.

Importantly, within the taking the time frame multiple values were foregrounded in decision-making, such as quality of life and wellbeing as part of being careful and getting the right response. For example, by 'bringing together the medical and the ethical' (field notes public health crisis meeting, April 2020), as one respondent explained, actors grappled with values by moving beyond the focus of safety (limiting infection rates). Instead of adhering to a one-size-fits-all approach that characterised the no time to waste frame, actors within this frame felt that the restrictions and consequences should vary between different groups and locations. They argued that a lockdown did not affect everyone equally:

> *Staying home indoors is harder for people in specific parts of the city, who live with larger families in one house, who live in smaller homes, which are moreover in closer proximity to each other than in other parts of the city.* (Quote from regional crisis meeting, April 2020)

Moreover, it was thought that the lockdown was specifically burdensome for children living in such areas. Actors therefore favoured more lenient enforcement of the restrictions, for example by allowing parks, playgrounds and public sports facilities to remain open or – in the first wave of the pandemic and first lockdown – by supporting the elderly care organisations that favoured staying open for visiting family. Concerned about loneliness and quality of life, some of these organisations started situated pilot experiments with visitors under strict safety rules that were closely watched by public health analysts. This timeframe thus grappled with values by opening up the focus to include additional socio-medical values, such as wellbeing and quality of life, as co-existing with the value of safety-as-physical- health.

Timeframe III: Future timeframe: Scenario building

The discussion moves towards the topic of domestic violence and child abuse. Although police records show a decline in the number of reports of child or domestic abuse, members of the scenario team argue that a lockdown will have a negative effect on children living in families where abuse has already occurred. Scenario thinking reveals a chain of connections between a longer lockdown, anxiety and reduced personal space or opportunities to escape on the one hand and, on the other, higher stress levels and, at the end of the chain, issues of domestic abuse and declining mental health. All participants actively contribute using their own professional expertise, and experience from their personal lives. News, other media items and research are shared and used to encourage critical and out-of-the-box thinking about the various consequences of pandemic restrictions for society. The endeavour results in a worst-case, best-case and realistic scenario description from a long-term and societal perspective which

will be handed to the pandemic control operational unit.
(Field notes from observation of scenario team meeting, April 2020)

The third frame is the *future* timeframe that anticipates different futures beyond the near future. The vignette above describes the first author's initial encounter with the scenario team[21], a group of actors dedicated to moving the focus beyond the short term. In the vignette we read how actors thought about domestic and child abuse as possible consequences of the COVID-19 measures. In this instance, they argued that a decline in police reports of abuse could not possibly mean an actual decline in abuse, and they therefore searched for relevant alternative information. By looking past the horizon and foregrounding the longer-term, this frame further broadened the focus towards societal effects of the pandemic and associated policy measures. In this way, this timeframe considers the social and long-term consequences for society not only of the pandemic itself but also, and specifically, of the potential effects of policy measures.

Within this timeframe, action was characterised by practices of *repair work*: repairing knowledge gaps by constructing best-case, worst-case and realistic scenarios for the medium and long term consequences of the pandemic. This anticipatory practice, known as scenario thinking, involved preparing for future risks by the imaginary enactment of different futures. All kinds of possible outcomes were considered and worked out, including the development of possible interventions to inform decision-making. Often, the need to anticipate the longer term or societal scope was framed using metaphors, for example the need to 'look beyond the horizon' of the short-term issues at hand. Instead of 'hammering down' (no time to waste frame) or 'dancing with' (taking the timeframe) the virus, this frame focused on 'living with the virus' in the long run.

Within this frame attention was steered towards social stability as the object at risk. The scenario team felt that pandemic governance should look beyond the health issues and ask what the associated measures meant for society. Team members were concerned about social disruption, domestic violence, child abuse and the economic consequences of restrictive measures. They felt that nobody wanted to 'talk about the consequences of relaxing some strict measures, the "hot potato" that is being passed on' *(field notes from observation of scenario team, April 2020)*. In this framing of the pandemic, actors considered the effects of policy measures instead of merely endorsing or enforcing them. The example below shows how a police officer advocated focusing on the long- term societal consequences for society:

An officer argues that we should not be looking into the sustainability of the coronavirus measures, their legal embeddedness or how to enforce them (such as the ways in which social distancing is being policed, preventing groups from gathering in public spaces), explaining that: 'After shutting down a house party with 20 attendees, we now ask ourselves whether there's a legal basis for enforcement, when in fact it would be better to ask ourselves exactly why do people behave this way.' Therefore, we should focus on people's behaviour and the long-term consequences of sustained coronavirus measures – such as allowing only three visitors into one's home – for people and how they cope.
(Fieldnotes from observation of scenario team meeting, May 2020)

The officer continued by foregrounding people's natural need for human contact and argued that they will either find ways to get it (for example, breaking the rules to organise house parties) or suffer the consequences of isolation and deteriorating mental health. Because both responses would have consequences for social stability and public order, a social and long-term perspective on society seemed more important to him than strict enforcement of measures or a firmer legal status.

Within the future timeframe attention was directed towards broader values at stake, such as social stability, continuity and public order, in addition to safety, wellbeing and quality of life. One striking example of foregrounding social stability and order was the emphasis on social unrest and disruption caused by ongoing COVID-19 measures. Operating within this timeframe meant that concerns and criticisms were taken seriously, informed by voices in the media explaining, for example, that 'feeding one's family is more important than following the rules' (field notes from observation of scenario team meeting, June 2020). There was room to consider the effects of those critical voices too. Regarding the acceptance of and compliance with the restrictions, for example, the team used different scenarios mapping out the most severe consequences for public order and stability. Strikingly, the possibility of social unrest leading to dangerous rioting was even anticipated as a realistic and worst-case scenario respectively[22], long before such riots in fact occurred. To address this, the team advocated 'offering the people prospects instead of hammering down all social and economic activity', such as organising strictly con- trolled open-air festivities as a social outlet, extending the opening hours of shops and cultural institutions instead of restricting them so as to spread shoppers and visitors throughout the day, and allowing outdoor sports activities to continue in creative (and safe) ways so that people could keep fit, physically and mentally. This timeframe thus broadened the scope of decision-making to include a safe, healthy and social approach to 'living with the virus' in the long run.

A matter of time: clashing temporal frames

All three timeframes reveal a specific response to a situation of perceived risk and uncertainty (see Table 2). Although this situation was commonly characterised with the word '*unprecedentedness*', ways of responding to it differed. As we have seen, the three timeframes can generally be linked to different organisational units and their institutional routines. However, there was also some differentiation as timeframes sometimes travelled through the various units. This indicates that timeframes are not necessarily exclusive to specific actors or

[21] The scenario team was a new multidisciplinary advisory body consisting of representatives from the 'general column' (crisis and risk management, communication, population care and medical aid), the military, the police force, the fire brigade, civil servants from various municipal services and municipalities, a social scientist and, as from September 2020, public health actors from the 'white/healthcare column'.

[22] Riots had already been described as a worst-case scenario in mid-2020, long before the first riots occurred in February 2021 and again in November 2021. According to several actors, 'Unfortunately, many worst-case scenarios eventually came true'.

	No time to waste	**Taking the time**	**Future time**
Focus	Short term	Short term	Medium and long term
Action/ practices	Speedy and decisive action, lack of knowledge does not impede action: better safe than sorry	Carefulness: analysing to fill knowledge gaps: searching and validating (new) knowledge	Repair work: repairing knowledge gaps by constructing best-case, worst-case and realistic scenarios
Object at risk	Scarcity, logistics and compliance with coronavirus measures	Delivering the right care to the right place; health in a broader sense (broader than infection rates)	Social stability
Values	Safety in the narrow sense (preventing deaths) and accountability. Narrow view on values, prioritising one focus, does not change over time	Safety (prevention of deaths), wellbeing and quality of life. Multi-dimensional view of values, multiple values are considered as co-existent	Safety in the context of public order and social stability, and continuity. Multi-dimensional view of values, value prioritisation changes over time
Key actors	Public safety, crisis and risk management	Public health	Scenario team, crisis and risk management and public health

Table 2. The three timeframes

units.

It was mainly in everyday practices and decision-making, when actors reasoning from all three timeframes sat together in crisis meetings, that the three frames intersected and were negotiated. It was in these moments that it became most clear that the frames were at odds with each other or, in the words of one respondent, how 'the clocks run at slightly different speeds'. The pandemic contained alternating waves of infections of varying severity, nevertheless the presence – and dominance – of the timeframes that steered decision-making did not change significantly.

Throughout the course of our research, it was predominantly the no time to waste frame that dominated decision-making. This is not surprising as the no time to waste frame was mostly enacted by actors from the regional safety authority, who were used to dealing with crisis and disasters and hence claimed to have more knowledge on dealing with them. Moreover, it should be noted that the regional safety authority was headed by the city's mayor who acts as the chairman. Naturally, having a mayor ultimately responsible and in control influenced the power dynamic within the governance approach. Early in the first weeks of the pandemic this dominant (institutional) position of the no time to waste frame was more or less accepted by all

actors, although the other two timeframes certainly coexisted and occasionally clashed. However, after the initial weeks the timeframes started clashing more explicitly. Below we describe some of these critical moments.

The no time to waste frame and the taking the timeframe clashed on many occasions even in the early stages of the pandemic. A striking example was around the construction of an emergency hospital as described above, where a key actor from the 'healthcare column' pushed for a different pace than those from the 'general column'. We saw here how some actors framed time as lacking and others as sufficient for diligent decision- making. The actors involved explained this as the difference between jumping at the problem immediately without full knowledge – as is customary for public safety actors – or being cautious and precise – qualities usually attributed to public health actors. Another striking example can be seen in the vignette below, which recounts a discussion about knowledge gaps in November 2020. At the time, the infection rates varied considerably between comparable cities and public health actors proposed further analysis to explain these variations. The discussion turned into a heated debate about the need for in-depth analysis:

Actor A states: 'It's absolutely urgent to pass on explanations (about the infection rates) to the national level. We must be able to take this to the national level now and not analyse it for another week, that will be too late.' Actor D agrees that it is urgent but says that 'what the numbers mean' remains an open question. More focus is needed to find an explanation, and a little more time for a 'deeper dive into the data'. Actor A disagrees and is visibly irritated, asserting that 'the numbers already say enough'. Actor F disputes Actor A's assertion and argues for more time to analyse the figures. Actor G also wants to avoid wasting a lot of time and energy on calculating the numbers 'to four decimal places'. To him, it's all about the general picture. Actor A agrees that it should be about broad outlines and argues against reporting the decimal places. 'The infection rates are already coming down, so perhaps in two weeks no one will even ask about this, let's not waste time on this.'
(Field notes from observation of regional crisis meeting, November 2020)

This fragment shows several actors operating from different timeframes. Actors arguing for more time and for not jumping to broad conclusions did so for several reasons. Firstly, they believed in the importance of more knowledge because it would help in future situations. Secondly, they argued that more knowledge could lead to better, situated policy responses instead of a one-size-fits-all approach. After this discussion, these actors were granted one day extra for their analysis. This way, values such as swiftness overruled precision and hence the values of safety and liability can be seen as dominating decision-making.

The no time to waste frame also occasionally clashed with the future timeframe, with the former always overruling the latter. While the incompatibility between these two frames was already obvious at the start of the pandemic, actual clashes became most apparent after the summer of 2020. In October, the scenario team presented its recommendations during the daily crisis meeting, against the backdrop of a second (partial) lockdown. The recommendations considered the long-term consequences of the coronavirus measures by addressing issues of

public order, continuity, and stability. At the time, recreational and cultural institutions were closed and shop opening hours were limited. The recommendations proposed the exact opposite: to 'open up society' again. The scenario team recommended organising alternative forms of entertainment, such as open-air festivals instead of indoor discotheques, and extending the opening hours of shops, cinemas, museums and so on. With the media reporting growing public resistance to the coronavirus measures, the recommendations were also meant to stimulate societal and economic stability and continuity. However, the scenario team's recommendations met with a harsh response:

> *Well, I think your recommendations have been overtaken by current events. If we move into the category 'very serious' (a high infection rate), then alternative forms (of entertainment) or extensions (of opening hours) are no longer appropriate, we must then look only at stricter measures, policing and influencing people's behaviour.* (Quote from regional crisis meeting, October 2020)

As infection rates were still high, actors operating from the no time to waste frame immediately rejected the recommendations. Without further ado, the meeting moved on to the next topic on the agenda. Similar confrontations happened right up to the end of our research. Even then, more than a year into the pandemic, the no time to waste timeframe prevailed as safety continued to be framed as a matter of numbers that could not be neglected. For example, when the scenario team again actively pushed for ' . . . moving towards a different kind of pandemic approach, one that's not just about enforcement but has leeway for long-term perspectives that are discussed together' (Quote from observation of crisis meeting, April 2021), their arguments were dismissed because of a perceived 'lack of time' or 'wrong timing'. Actors operating from the no time to waste frame argued that decision-making could not yet move beyond the high numbers, compliance with the coronavirus measures and capacity issues. As a result, values like social stability, continuity and well-being were once again overshadowed by an approach dominated by values such as safety and liability.

The dominance of the no time to waste frame did not stop actors from developing other perspectives, however. They anticipated the other two frames behind the scenes around their daily decision-making table, in their own organisational units and with other partners, endeavouring to exert as much influence as possible. In general, however, COVID-19 decision-making continued to focus on finding solutions for the short-term problems at hand, with little regard for other voices.

Discussion

More than three years after the discovery of the SARS-CoV-2 virus, in May 2023 the Director-General of the WHO (2023) declared that COVID-19 no longer constitutes a public health emergency of international concern but instead is now an established and ongoing health issue. Although the end of the pandemic was not widely televised, as predicted by Robertson and Doshi (2021), research organisations and governments are currently evaluating pandemic policies and decision-making. Many studies focus on effectiveness of measures in terms of infection rates and mortality (see Agyapon-Ntra & McSharry, 2023; Tsou et al., 2022), fitting in with the 'no time to waste frame', while only a minority take broader societal issues into account (see OvV, 2021; 2022; van Bochove et al., 2022). A key issue in these latter evaluations and in the broader public debate during the pandemic was how policy should incorporate different public values. Our paper contributes to this discussion by showing how timeframes foreground different patterns of action, objects at risk and values.

Our analysis fleshed out three timeframes: 1) the 'no time to waste' frame, 2) the 'taking the time' frame, and 3) the 'future' timeframe. We showed that the 'no time to waste' frame dominated decision-making in the Dutch urban region of our case study. This was the case throughout the pandemic, not only during the first wave, when knowledge was especially limited, but also beyond the first panic. Driven by a frame of lacking time and the precautionary notion that it was 'better to be safe than sorry', the infection rate as an object at risk remained leading. Consequentially, the values of safety (in terms of keeping infection rates low) and liability (in terms of being afraid that history will show not having done enough) overshadowed values like well-being, quality of life, social stability, and liability in the present.
In line with the literature on framing (Orlikowski & Gash, 1994; Rein & Schön, 1993; Stone, 2012) and in opposition to the objectified conception of time in crisis management literature, our study highlights how timeframes matter because they structure the ways in which normative choices and dilemmas are considered and political decisions are made. We have seen how the framing of time, for example as lacking or sufficing or using a longer-term or a shorter time reference, has consequences for practical action, the object at risk and the values at stake and vice versa how the organisational inclination towards a specific pattern of action, object and values informs the experience of time. We agree with Deborah Stone (2012) that decision-making is highly political and normative, rather than the outcome of a rational decision-making process. In our case, the no time to waste frame was particularly influential in shaping pandemic decision-making.

We do not mean to argue that one timeframe is better than another. In our case study, the 'no time to waste' frame ensured that 'the job got done'. It did so, however, in a particular way. Actors created a sense of urgency that required fast decision-making, problem simplification and a single-minded focus. Consequences of this were that the municipal council's enquiries regarding expenditure and restrictions on the use of public space were being stifled. Questions such as 'who should show solidarity with whom', 'what kind of safety, and for whom' and what type of responsibility remained unasked and therefore unanswered. Young people had to show solidarity with older frail persons, for example by not gathering in public spaces or in groups. In the same vein, vulnerable families had few options, despite concerns about abuse or deteriorating mental health. Interestingly, the notion that curtailing the use of public space to get people to stay at home for reasons of safety assumes that the home is a safe place for everyone (Milligan, 2009; van den Berg, 2020). With 'no time to waste' being dominant, however, other timeframes and, consequently, other values – local democracy, equity and wellbeing – voices and measures were side-lined.

Our analysis shows that as although the 'no time to waste' was dominant, it is not the only way to govern the pandemic. Importantly, as Giddens (1993, in Orlikowski & Yates, 2002, p. 688) argues, it is precisely because temporal regimes are constituted through and maintained by action that they too can be changed through processes of re-framing. Timeframes can – and should – be reshaped because different frames are crucial to making difficult political-administrative choices between the conflicting interests and values involved in a balanced approach to pandemic governance. Here, the work of Whyte (2020; 2021) offers an interesting alternative perspective. Whyte gives an account of the Indigenous way in which time is narrated as unfolding through kinship relations in the context of climate change, as opposed to the way in which time usually is narrated as unfolding through the passage of uniform linear units. Looking at time as unfolding through relations of kinship brings in a broader responsibility, as kinship relations are grounded in shared responsibilities. Hence, in the context of searching for solutions and measures, a coping strategy based on shared responsibilities moves beyond swift action that – as we have seen in our fieldwork – conceals the responsibility to others who are at risk of being harmed by pandemic measures (Whyte, 2021).

For our understanding of the underlying processes of decision-making it is important to consider the relationship between different constructions of time and specific patterns of action and subsequently the prioritisation of different objects at risk and values. Our empirical work shows that this is a reciprocal relationship. We analysed that framing time in a certain way generally led to considering different actions, values and objects at risk. Vice versa however, we also analysed that by deploying familiar patterns of action or prioritising certain values or objects at risk, a specific framing of time was reinforced. For example, by putting an emphasis on reducing the spread of infections, the 'no time to waste' frame became more dominant, whereas the other timeframes came into view when looking at the social consequences of measures taken to curb infection rates.

Moreover, our empirical work shows how the three timeframes were embedded in organisational structures and how they competed and were negotiated by different stakeholders. We have seen, for example, how a scenario team yielded a 'future time' frame by taking the longer view and looking beyond the pandemic horizon. Likewise, we have seen how public health actors in the 'white column' focused on 'taking the time' to make what they considered were important decisions. In these two approaches, we recognise ways in which actors try to consider the mutual and shared responsibilities through which time can unfold, as Whyte (2021) describes. We take inspiration from these alternative approaches because they show that the 'no time to waste' frame in governance is neither intrinsic nor absolute.

To this end, we argue that timeframes should be made explicit to allow multiple interests and values to be brought to the table. Hereto it is important to explicate which values and objects at risk are addressed or deemed important, to illuminate which shared responsibilities are at stake in looking for ways of managing the pandemic. It is paramount to emphasise, however, that alternative timeframes, interests, and values are only worth exploring if they are given a serious voice in decision-making. We argue that this can be achieved by making the idea of shared responsibilities part of the decision- making process. While such reflections might be difficult – if not impossible – at the height of a crisis, we have seen many moments in which reflexive discussions could have taken place, such as between the 'waves' of the pandemic. In our case study, such moments however were not used effectively. More thorough evaluations of decision- making practices would however have been possible.

Lastly, in pointing out the importance of timeframes for decision-makers and experts and how these frames impact the way in which interests and values are weighed in policy debates, we offer lessons for 'pandemic preparedness' and beyond, enriching the literature on temporality and decision-making (Barbehön 2021; Geiger et al., 2021). We have illuminated how different frames of time result in specific patterns of action, focusing on different objects at risk and public values, and why this is important for our understanding of the underlying processes of decision making, particularly in group decision-making or public forums where competing values and different groups are represented. Because time is a central feature in all situations of high-stake decision-making in the context of uncertainty and external pressure, it is important to consider time as mediating values and objects at risk. Our analysis of decision-making is timely, not only in the context of the discussions about pandemic preparedness but also, and more specifically, in relation to other disasters and crises involving conflicting interests and values. For example, decision-makers and experts grappling with the climate crisis could articulate and negotiate different timeframes as they seek to balance various interests and values in risk governance. Further research on time-framing would benefit from comparing timeframes within different types of crises to examine which frames prevail, why, and with what consequences for wider society.

Conclusion

In this study we examined how timeframes played a key role in COVID-19 policymaking in the 'regional safety authorities', an important decision-making forum in the Netherlands. We fleshed out three timeframes: 1) the 'no time to waste' frame, 2) the 'taking the timeframe, and 3) the 'future timeframe' frame, as apparent in the analysis of our observational and interview data. We revealed how the no time to waste frame dominated decision-making, producing a solitary focus on a rather narrow view of safety, while side-lining other time-frames, voices, measures and values. For example, choices in focus were made between safety in terms of infection rates and wellbeing. We argued that timeframes can and should be made explicit and negotiated in decision-making.

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Chapter 7
Discussion

Introduction

In recent years, cities have increasingly been depicted as dynamic centres of experimentalism, driven by the imperative to find creative solutions for complex global challenges in times of increasing uncertainty. Experimentation as a mode of (urban) governance, travels around the world and is taken up in myriad ways (Evans et al. 2016; Karvonen 2018; Marvin et al. 2018). This dissertation is about urban experimentation with a focus on the creation of the Healthy City. I have analysed how urban health experiments as governance arrangements are constructed and enacted, thereby revealing the political choices and assumptions involved in constructing and practicing the Healthy City and the consequences thereof.

Despite the prevalent discourse on urban experimentation and its potential for innovation and solutionism (Bulkeley and Castan Brotó 2013; Engels et al. 2018; Karvonen and van Heur 2014), the Healthy City is far from straightforward. Neither what a Healthy City is (and which interests, knowledge and values are taken into account), nor what an urban health experiment is, is *a priori* given. Both are dependent upon the normative political interpretation given to them and their implementation, and therefore, have consequences for how the Healthy City is given shape in practice. Crucially, it means that the Healthy City is plural. This thesis gives insight into this plurality.

The main research question I addressed in this dissertation is: *"How are urban health experiments constructed as a governance practice and what are the consequences thereof?"*

The main question is divided into the following sub-questions:

1. *Who gets a say in urban health experiments and what does this mean for processes of in- and exclusion of voices, knowledges, and values?*
2. *How do urban health experiments reconfigure responsibilities between the (local) government and citizens?*
3. *How does the notion of 'free' experimentation relate to the institutional context in which urban health experiments take place?*

To answer these questions, I followed four urban health experiments: an urban (living) labs case study; a resilient city initiative; an algorithmic governance experiment with youth care; and COVID-19 decision-making for public health. This multi-sited ethnography took place from the beginning of 2018 until the end of 2022. I have used different concepts and theories to make sense of these experiments. These include urban imaginaries and imaginative work (chapter 2), liminality and the institutional void (chapter 3), resilience and governmentality (chapter 4), smart city and algorithmic governance (chapter 5) framing and the sociology of time (chapter 6). These concepts and theories were used to conceptualize and illuminate processes of in- and exclusion, shifting responsibilities and the interplay between the experiment and existing institutional contexts.

In the remainder of this chapter, I answer the research questions based on the insights of these different chapters. I then describe the implications of this study for theory, practice, and methodology. After the implications, I provide recommendations for future research. This chapter concludes with reflections about the inherent plurality of the Healthy City concept.

Who gets a say?

Analysing urban experimentation from a critical perspective brings a focus to 'the right to the city' (Harvey 2005). It means showing who is involved and to what extent citizens are able to influence urban governance, thereby shaping the Healthy City (Bulkeley and Castan Brotó 2013; Evans et al. 2016; Horstman et al; 2022; McFarlane 2011). When the urban health experiment serves as a vehicle to learn about health and wellbeing, it operates as a truth-spot (Gieryn 2006) for the Healthy City. Therefore, it matters whose interests, knowledge, and values are included.

The urban lab practices studied in this dissertation illustrate in- and exclusion mechanisms in the context of experimenting the Healthy City. In chapter 2 I used the notions of *imaginative work* and *city-making literacy* as sensitizing concepts to reveal *who has access to and who is allowed to imagine and experiment in the city*. This allowed me to analyse the mundane practices of conception, construction, and operationalization of urban labs. By working 'differently' in urban labs, actors were sometimes able to open up practices to include other values, voices, and knowledges, as both chapter 2 and 3 show. An interesting example is the urban lab that succeeded in including 'soft' values, such as liveability, social cohesion and experimentality (as opposed to mere hard business criteria) into a European tendering process when an urban space, developed and occupied by creatives, was put on the market. Another telling example is the participation of urban residents in collecting air pollution from a polluted urban area, that led to the creation of new knowledge. By combining the collected data with data from a renowned knowledge institute, they were able to provide insights into the health consequences of car mobility in the city. In doing so they succeeded in putting the value of air quality on the municipality's political agenda.

However, my thesis also shows that urban labs are not an inclusive participatory space by default as is sometimes suggested (Dekker et al., 2017; Puerari et al., 2018; Steen and van Bueren, 2017). For example, in the cases I studied imaginative work was conducted mainly by actors with a background in design or architecture or by future-building agencies[23]. These urban residents possess city-making literacy. That is, they master the language and skills that are needed to participate in experiments, from how to apply for subsidies to how to talk to civil servants about the results of experiments. As a consequence of this dominance of the 'creative professional caste' within urban experimentation, there was less room for inclusive participation by 'lay' residents and their perceptions of the Healthy City. This brought into being experimental urban practices that mainly revolved around redesigning public space, such as redeveloping sidewalks, green spaces, and meeting places. Less prominent were social issues such as livelihood security or education (with some exceptions).

Similarly, the urban health experiment aimed at developing an algorithmic tool for youth care shows how the interests and knowledge from youth care recipients and professionals were side-lined in the development of the algorithmic tool (chapter 5). Here, I witnessed a 'failure' to merge qualitative experiential knowledge with previously collected quantitative data. Costumer-journeys with users and co-creation sessions with professionals brought forth knowledge beyond individual factors, such as information regarding systemic issues related to a failing youth care system – e.g., waiting lists, mismatches between demand and supply of care, a lack of trust between youth care users and professionals, and increasing poverty and health inequalities. Although users and professionals identified these issues as important risk factors for youth care, the information was not incorporated into the algorithmic tool. This is a shame as this knowledge provided an alternative perspective on the Healthy City, one related to the lifeworld of users and professionals. However, this perspective was not reflected upon as it was presented by the municipal data scientists and policy advisors as incompatible with the quantitative municipal data model and therefore not relevant for the next steps to be taken. Because the focus was on the technical issues of creating the tool, there was no discussion about the assumptions behind the desire for designing this tool, although this could have resulted in opening up the issue of youth care and ways to improve it. Hence, because of a technical framing of the problem of youth care, this experiment did not deliver on its democratic promise but brought forth 'again a fatal remedy' (van Zoonen 2019) a term used to refer to the perverse consequences of policy interventions (Engbersen 2009; Sieber 1981).

Lastly, the COVID-19 crisis-management case further illustrates the dominance of a certain framing of the problem and a lack of opportunities for reflection on other possible frames. The dominant 'no time to waste' frame resulted in swift decision-making and action, prioritizing prevention and safety in terms of limiting infections over wellbeing and quality of life (chapter 6). Actors framed time as if there was none, thus requiring problem simplification and a single-minded focus on reducing infection rates. In this context the values of safety (in terms of keeping infection rates low) and liability (in terms of being judged for not having done enough) were prioritized. Consequently, other values that were expressed by actors reasoning from other time-frames such as well-being, quality of life and social stability were overshadowed and side-lined. As Deborah Stone (2020) argues, what gets counted, counts. In this case, focussing on infection rates and deaths led to valuing health-as-safety over health-as-wellbeing, that could not be – and was not – counted and conveyed as meticulously as the infection and death rates that were considered providing more 'hard' and valid numbers. In this context, questions such as 'who should show solidarity with whom', 'what kind of safety, and for whom' and 'what type of responsibility' remained largely unasked and unanswered. Young people were expected to show solidarity with older and vulnerable people, for example by not gathering in public spaces or in groups. In the same vein, families in a vulnerable position were not supported, despite concerns about deteriorating mental health and domestic abuse.

[23]Future-building agencies consist of organizational actors who organise the production of imaginaries. They are usually spin-offs of architectural firms who, by catalysing energy in the context of building comprehensive images of the future, provide a mindset for institutional change and imagination of alternative urban futures (Savini, 2019).

The different experiments show that there were indeed different interests to be addressed, different ways of valuing health and thus the Healthy City, and different kinds of knowledge that could be used to interpret health and well-being in the city. However, not all voices, knowledge, or values, and hence the different ways of approaching the Healthy City, were given equal consideration. This is despite the fact that the experiments did offer opportunities to open up this debate.

Reconfiguring responsibilities between (local) governments and citizens

This second sub-question describes the ways in which the urban health experiments in this dissertation reconfigured responsibilities between local governments and citizens. The chapters show a variety of attempts of organizing this relationship differently through experiments. I have observed how citizens, entrepreneurs and organizations were invited and enticed to come up with innovative solutions for pressing urban issues in pro-active ways, giving citizens opportunity to shape urban policy. At the same time, the way experimentation was given shape increasingly shifts responsibility towards citizens.

First, the case study about urban labs shows how citizens actively took over activities that were previously a (local) governmental responsibility (chapters 2 and 3). For example, in an urban lab that focused on health, wellbeing and solidarity in the neighbourhood, citizens organized themselves in a neighbourhood cooperation. Their goal was to increase the self-reliance and self-organizing potential of the neighbourhood and its citizens and to strengthen its (social) infrastructures through the provision of (local) labour and services (e.g., grocery shopping, installing domestic tools for independent living etc.). Such activities were previously executed by (health)care organizations and financed by the (local) government. Another example within this case study is an urban lab that focused on public green spaces, in which citizens were engaged in reorganizing public space in the context of major construction plans. Citizens improved the quality of the public space by designing green meeting spaces and citizens with mental health issues were given the responsibility for maintenance. Common to these activities is that they were formerly provided by municipal social policy. They reveal a shift in which citizens take over or share responsibilities, sometimes because issues were left unattended and required attention but also because citizens felt they could organize them better themselves or in cooperation with municipal actors.

Another example of reconfiguring responsibilities comes from the resilient city experiment and has more precarious consequences. This urban health experiment too revealed shifting responsibilities from (local) governments onto citizens (chapter 4). Several initiatives within this experiment created space for sharing hopes and dreams of residents, for example to improve the neighbourhood, to develop new skills, to self-organize, and to manage a community centre. For residents that were able to participate in this context, these new responsibilities were stimulating and empowering. Simultaneously though, it also increased the precarious position of citizens. I observed that the responsibility of 'doing' resilience was especially placed on women and volunteers. Examples include projects aimed to improve citizens' labour market skills, but without the prospect of sustainable employment or the promotion of women's unpaid community work as a prime example of resilience. Likewise, a 'climate living room' initiative provided a shared space for citizens to learn about ways of dealing with energy issues and to share their concerns. This gave relieve and social cohesion but at the same time responsibilised residents into dealing with this issue themselves. While technical resilience issues, such as the energy transition and the construction of heat or water squares, were taken up by professionals and with sufficient financial support, citizens expressed their concerns that 'social' resilience issues like loneliness and community work were expected to be taken up by residents-turned-volunteers. These findings resonate with insights from critical scholarship about new urban governance arrangements that bestow responsibilities for wellbeing upon citizens who are least able to challenge unequal power relations, instead of offering neutral empowering tools that facilitate involved communities and active citizenship (Swyngedouw 2005; 2016).

In a different vein, the urban health experiment that aimed to design an algorithmic tool invited citizens to partake in the design process (chapter 5). This would produce a shared responsibility for preventive youth care policy in a democratic fashion. Eventually, the analysis shows how the experiment neglected to reflect upon the problem definition and underlying assumptions of the youth care system and thereby neglected the broader systemic context. Because the tool ended up merely including existing individual (risk) factors of urban youth into the algorithmic tool (such as 'one parent family', 'language spoken at home', 'number of relocating home address', 'use of pre-school facility'), youth care appeared as a problem to be approached only through (better supporting) individual families, rather than a systemic problem in which the (local) government reflects on its own role and takes responsibility to instigate system change.

In conclusion, urban health experiments and the way they shape the Healthy City, reconfigure responsibilities and the relationship between citizens and government. On the one hand this can lead to initiatives that citizens can benefit from. The first example showed that urban experiments can provide opportunities for citizens who felt they could organize things better and are able to do so. However, urban experiments simultaneously resulted in a neglect of addressing underlying issues and structures. Moreover, they reveal a shift towards responsibilizing individual citizens and communities for activities that were previously addressed by (local) governments. In this way, inadvertently, these experiments can lead to governmental precarization (see also Isabel Lorey, 2015): a situation in which uncertainty is maximised while security is minimised. Hence, urban health experiments are not a guarantee that they will lead to a Healthy City for everyone but are dependent upon the choices made within each experiment.

The illusion of 'free' experimentation and the role of institutional context(ing)

This last sub-question highlights how existing institutional frameworks offer opportunities for experimentation and doing things differently but can also stand in the way of the potential of experiments to enable reflection and actual change. Actors use urban health experiments to create a space of exception: an open-ended space that is temporarily exempted from standard

rules, regulations, and practices in order to experiment freely. The logic of the experiment is said to create an immanent timeframe, suspending the history of previous policies and strategies and anticipating a future that will be the improved version of the present (Schinkel 2023). Despite the promise of exception, this dissertation highlights how the urban health experiments in this study did not exist in an institutional vacuum but instead interacted with existing policies and practices, with specific consequences. The cases in this dissertation show that urban health experiments are embedded in a dynamic relationship with institutional routines and regulations. This has two important consequences for experimentation depending on how the experiment is deployed. On the one hand, existing policies and governing practices influence the extent to which experimentation can actually be free. On the other hand, the space of exception can lead to an institutional void that creates risks for legitimate decision-making and accountability.

Chapters 2 and 3 reveal the duality of actors' practices of working with the system but at the same time also being constrained by it. Chapter 2 highlights how actors – 'lab-makers' – strategically used the label of the 'urban lab' in order to get things done, such as receiving grants, gaining freedom to act, and receiving attention. This allowed them to be able to work outside of the regular context. They circumvented rules and regulations in order to learn from new interventions outside the system, such as regular European tendering processes, social health services and municipal public health policies. However, the (funding) system also constrained the free nature of urban lab experimentation. Due to co-funding by national funds such as the Stimulation Fund for Creative Industry or the local government, they had to comply with a specific institutional focus in order to be able to receive this funding in the first place. For the experiments in the urban labs case study, this meant that the labs tended to focus more on design and public space than on social issues in the city. This focus can be further explained by the fact that citizens who applied for this funding tended to be from the 'creative caste' with a background in architecture and design.

Trying to experiment within a certain institutional context led to the value trade-off 'working closely together with policy makers versus taking an autonomous activist position' which is discussed in chapter 3. This trade-off shows how the relationship between the local government, lab-makers and citizens remains a careful negotiation. When lab initiators work too closely with institutional actors, they risk being co-opted into standard policymaking. When they do not cooperate or stay at a distance, lab initiators often do not have access to the right resources to make an impact. To manage this trade-off, lab initiators often strategically used the liminal nature of the lab: as an in-between space between life world and the system, the lab could be interpreted and positioned in different ways, thereby ensuring that the lab could not be captured by either side.

Despite the benefits of the liminal status of urban labs, there are risks in terms of legitimate decision-making and accountability. The liminal 'in-between' status of experimentation can potentially create an institutional void in which 'there are no clear rules and norms according to which politics is to be conducted and policy measures are to be agreed upon' (Hajer 2003, p. 175).

Because urban labs are positioned outside the regular system, there are no clear rules to ensure that decision-making is inclusive and legitimate. Chapter 2 shows that specific voices dominated urban lab experimentation revealing a lack of inclusivity (see also question 1 above). In addition, chapter 3 shows how institutional stakeholders like the municipality or real estate developers used their power to mobilize the institutional context of formal mandates and rules, thereby restricting free experimentation and excluding alternative political choices. For example, using the experiment to implement housing policies that would benefit gentrified neighborhoods rather than increasing access to social housing.

In another vein, I observed how institutionally embedded ways of steering and monitoring through key performance indicators and indexes played a crucial role in restricting the experimental practices of resilience and algorithmic governance (chapter 4 and 5). In the resilience experiment (chapter 4), the use of the safety index as a monitoring tool led to the (undesirable) displacement of a high-ranking civil servant who played a crucial role in promoting the open-ended nature of the experiment. Here the institutional context of old governing techniques interfered with newer ones. Similarly, the algorithmic governance experiment revealed a biased focus on quantitative data and indicators that local governments already collect, neglecting user experiences that could not easily be turned into quantitative data. In both cases, the dominance of the existing context (e.g., the wish to govern based on quantitative indicators) hampered the inclusion of alternative voices, knowledges, and a sharing of responsibilities.

Lastly, the analysis of COVID-19 decision-making reveals how the institutional context of dealing with crisis with a strong reliance on the safety domain dominated public health responses, thereby contributing to the exclusion of alternative approaches. This experimental urban health endeavour shows how in a process of innovating 'on the go' under conditions of high perceived risk and high uncertainty, known and common institutional approaches prevailed (cf. de Graaff et al. 2023 for this dynamic in the healthcare sector). Actors working within the safety authority, the organization that was responsible for handling this public health crisis, continued to rely on their own crisis management methods. Despite the fact that some actors tried to put forward alternative approaches, the institutional context and regular practice of the safety authority prevented actors to acknowledge and incorporate alternatives.

In conclusion, this sub-question shows how the institutional context influences urban health experimentation. Although municipalities specifically aim to use urban experimentation to enable innovation, the institutional context of these experiments often limits the inclusion of alternative perspectives and practices.

Overall conclusion: the micropolitics of the Healthy City

Finally, answering the three sub-questions helps me to answer the main research question: *"How are urban health experiments constructed as a governance practice and what are the consequences thereof?"*

Experimenting the Healthy City reveals an attempt to govern the city differently in line with New Public Governance with its focus on collaborative arrangements and active participation of different actors who bring in creative ideas, knowledges, and relevant experiences to help design and implement novel and daring solutions (Torfing et al. 2021). Urban health experiments are often initiated with the aim to create and steer solutions in new ways and as such urban health experiments can be conceived as a governance practice of the Healthy City. Indeed, the experiments in this dissertation exhibit the ambition to think creatively, go against the grain of regular practice and to operate in a bottom-up (or middle-top-down) fashion (with the COVID-19 case as an exception to this ambition). This means that, ideally, experiments can accomplish things that could not be accomplished in regular practice, because participants reconfigure boundaries and push for change. Creating spaces separate from regular institutional practice can stimulate people to think and act differently. This can lead to social innovation. Think of the examples of the urban lab that accomplished incorporating their own 'soft values' such as liveability, social cohesion and experimentality into tendering criteria when the building was put on the market, or the urban lab that succeeded in putting air quality on the urban agenda.

This dissertation shows that there are underlying interests, knowledges, and values present in urban health experiments, which partly depend on who is able to participate and the institutional context of these experiments. These have consequences for how the Healthy City is constructed. Hence, these experiments are not neutral practices.

I do not aim to question the potential of urban health experiments as a mode of governance. However, studying urban health experiments in practice reveals a variety of complexities that need more reflection if this potential is to be reached. Importantly, it shows the need for more attention for the political assumptions and choices involved in constructing, practicing, and governing the Healthy City (cf. Horstman and Knibbe 2022). Disregarding these political choices can lead to undesired consequences in terms of the in- and exclusion of actors, interests, knowledges, and values, the sharing of responsibilities and the interaction with existing governance and policy frameworks. As urban health experiments constitute and reconfigure urban governance and have a pivotal role in shaping the Healthy City, it raises the question "whose idea(l) of the Healthy City" they bring into being?

Although urban health experiments generally aim to include different voices, the cases in this dissertation show that this is not easily accomplished in practice. Actors differed in their views on what was of value for the Healthy City: multiple, even conflicting interests, knowledge practices and values often existed simultaneously. However, these were not often topic of debate which limited the potential of bringing alternatives to the fore that challenged the status quo.

This can have undesirable consequences. For example, sharing or transferring responsibilities for social care onto citizens that are not able to participate accordingly can have precarious consequences. The lack of reflection on the political assumptions and choices made are partly the result of the fact that the experiments are strongly intertwined with existing institutional contexts. 'Doing things differently' proved difficult in practice because these alternative inputs were not used to challenge dominant institutional frameworks, assumptions, and power relations as they were too dominant to break through.

This dissertation has shown that not sufficiently acknowledging or dealing with the politics of urban experimentation can lead to unintended or adverse outcomes. While policy and interventions will always have unintended consequences, the inadvertent effects of these experiments were currently not noticed or addressed sufficiently in experimental learning processes. To truly do justice to the multiple interpretations and meanings of the Healthy City for different people and to push for (radical) change, it is paramount that the underlying politics are acknowledged and articulated, and important issues are addressed before, during and after any process of urban health experimentation. The urban health experiment, ideally positioned as a space of exception, would therefore benefit from being a space 'in between' (Gorashi et al. 2023) or a space of reflection (Wiig et al. 2021). To avoid the risk of an institutional void and possibly a democratic deficit within these spaces, it is crucial not to merely rely on dominant voices, data, and practices. Hereto, it is important that attention is paid to complement regular accountability mechanisms with suitable alternative accountability mechanisms for these spaces, such as narrative accountability that does justice to complexity of relations and the context of specific practices (van de Bovenkamp et al. 2023). Bringing together different voices, data and practices in this way can help to further articulate (urban) issues.

The cases in this dissertation offer interesting starting points for these reflexive in-between spaces. For example, the scenario team in the COVID-19 case the data case with its costumer journeys explicitly show attempts to reflect and think critically about public issues. However, they did not have much impact because they were only debated as such to a limited extent as they were not embedded in the institutional frameworks or practices in place, or because their outcomes were considered less valid than 'hard' numbers. In order to be able to make a change in the present, discussion and reflection in these spaces needs to be harnessed further. Hereto, the next section provides some important practical implications.

Practical implications

This dissertation provides important implications for practitioners regarding the politics of urban health experimentation. Urban experiments are often presented as catalysts for transformation. In this light, they serve as an effective tool for participation in public affairs and, at times, for politicizing urgent urban matters. However, inviting various actors to experiment does not automatically lead to inclusion of different voices into (policymaking) processes, to a just sharing of responsibilities or to free experimentation. In this context, this dissertation provides policy implications on different levels.

First there are lessons for municipal policymakers and initiators with regards to (A) the different in- and exclusions, (B) shifting responsibilities, and (C) the influence of institutional frameworks in the context of the Healthy City. In order for the in- and exclusion of different voices or expertise to be taken seriously (A), the stage for participation has to be set-up right (Hajer 2005; Verloo 2023). Therefore, initiators of urban experiments have to consider how their set-up, or the 'staging' of the experiment, can be done in such a way that it incorporates different interests, knowledge, and values into the process. If practitioners want experimentation to be open-ended, creative, and just, it is important to explicitly articulate and openly negotiate the underlying complexity and plurality during any experiment. This means explicating and acknowledging the different assumptions, interests, types of knowledges and values that different people bring to the table (Greenhalgh et al. 2023; Oldenhof et al. 2022). Importantly, the multiplicity of voices should be included in the early phase of problem definition, not merely in the design of solutions after the problem has been established (Gorashi et al. 2023).

As a result of this reflexive mode, the reconfiguration of responsibilities (B) can be reflected upon as an issue of solidarity and a just sharing of responsibilities and capacities, in the context of the Healthy City. This means acknowledging that not everybody can participate on governments' terms (Putters 2018). Shifting responsibilities towards citizens can be an empowering and creative process for some but can be burdening for others. Reflecting on the underlying complexity of urban health experiments could prevent unjust and precarious outcomes.

Lastly, initiators of urban experiments need to seriously take the institutional context into account (C) when aiming to 'make the impossible possible'. Although labelling a space of exception has performative effects (see chapter 2), it does not free the experiment from its institutional context. Importantly, urban health experiments should not only be used to gain freedom but also to work on systemic changes. Therefore, initiators should explicate the (legal) institutional framework and practices to determine the extent to which they are allowed experimental freedom or to come up with ways to work with the frameworks in order to allow for (radical) change.

Neglecting to address complexity may inadvertently conceal the structures and systemic causes behind issues or the political implications embedded in experimental urban governance. Inadvertently, it can depoliticise issues in cruelly optimistic ways (Berlant 2011). It is crucial to note that elucidating and recognizing diverse assumptions, interests, knowledges, and values doesn't guarantee equal justice for all; it inevitably involves certain trade-offs. By making assumptions and a range of choices explicit, actors can make well-informed decisions and opt for alternative courses of action.

In order to re-politicize the Healthy City, political discussions within urban health experiments should also be connected to broader democratic decision-making processes, such as in the local council. Moreover, thinking about the Healthy City should be connected to the classical political question regarding who gets what, when and why. This requires more reflexivity, for example from policymakers, aldermen etcetera, to make this happen. Think for example about the 'soft' values that were added to a European tendering process. This is usually taken up as an inflexible process, but in this case urban actors together with municipal policymakers took up space for local additions to this legal institutional framework. Hence, actors connected the micropolitics of the experiment with the larger politics of an institutional framework, in fact repoliticising an urban issue. This should also be done for example with the transition towards data driven (algorithmic) governance. Currently there is a lack of political discussion about the use of data and algorithmic governance within the municipal council, while the consequences are highly political (Kersing et al. forthcoming; Siffels et al. 2020; van Zoonen 2020). Similarly, there was a lack of political discussions about COVID-19 measures during the pandemic, where the consequences were particularly political. This shows the importance of re-politicizing urban topics.

Theoretical implications: new urban governance arrangements and the right to the Healthy City

First, this dissertation contributes to the Science and Technology literature as it gives an empirical account of the process of urban laboratization, a term coined by Guggenheim (2012) to refer to the use of laboratory vocabulary to denote places outside the traditional laboratory as places of knowledge production. All case studies have been denoted by field actors as laboratories: the urban labs are a very clear example, but likewise the 'workshop' refers to the laboratory, the resilience program at the neighbourhood level was called a living lab and even decision-making in the city during COVID-19 was referred to by policymakers as a 'living laboratory'. Contrary to STS studies, the chapters of this dissertation analyse urban health experimentation as a governance practice enabling an analysis of the politics involved, which is something that is mostly missing in STS studies that primarily focus on epistemic practices.

Secondly, by providing an account of the plurality and complexities inherent to experimenting the Healthy City, this dissertation provides an antidote against too optimistic expectations about urban health experimentation as a straightforward framework for participatory and democratic spaces by default, often found in public administration literature (Dekker et al. 2017; Puerari et al. 2018; Steen and van Bueren 2017). This dissertation adds a critical contribution to the NPG and urban and experimental governance literature. While these literatures are optimistic about this new governance arrangement for being (more or less) horizontally dispersed, more experimental, and open to new and different actors, this dissertation highlights how these processes are less straightforward than assumed because of the fact that they contain politics both in their construction as well as in their consequences. It thereby adds to insights to this literature by offering empirical insight on in and exclusions, shifting responsibilities, and the influence of institutional frameworks in the context of the Healthy City.

Related to that argument, lastly, this dissertation provides a novel and relevant contribution to the Healthy Cities debate (and movement). In line with Frissen's (2023) critique on integrality, this dissertation critiques straightforward notions of health for failing to address the hidden politics underlying this notion. In the Integral State, Frissen critiques the broad and integral

conception of health (and prevention) as a form of totalitarian policy that emphasizes the idea of malleability and manufacturability of health. Moreover, integral policy reduces value plurality by foregrounding one mainstream value (e.g., prevention) that that does not necessarily resonate with everyone. Finally, as a hurrah word (Bovens 2005) integral Healthy City policy masks various trade-offs and possible unintended and negative consequences, which should be made explicit. In this thesis, I have shown many examples of the consequences of such unreflexive 'integral' policymaking processes.

Methodological implications

The rise of urban experimentation in cities around the world gives researchers ample opportunity for studying actual experiments on the ground floor. The burgeoning discourse of urban experimentation lends itself for policy researchers to dive into the topic and to come up with a step-by-step roadmap. However, I feel this should not be the way forward. I took inspiration from Uitermark (2015) who pleas for uncovering the uneven politics of policy and argues against social scientists who, as modern-day Machiavelli's 'assist the government in merely mapping out civil society and getting a better grip on what goes on there' (Uitermark 2015: 10). The methodology that I used in this dissertation substantiates Uitermark's call by researching the (uneven) politics of urban health experimentation. Instead of a roadmap, this dissertation provides a reflexive guide. In this way, coming back to Latour's quote in the introduction, this dissertation functions as an arena to critically think about health experiments in the city, taking seriously its consequences, and as a way to assemble lessons for doing more justice to the plurality of urban health experimentation and the Healthy City.

Hereto, I want to emphasize the importance of 'being present' and the use of extended ethnographic research. My research shows that taking on a processual approach on urban health experiments and following the practices of actors, reveals the continuous work that goes into experimentation, instead of highlighting solely the ambitions and visions that are present during the initial phase of any experiment. This processual approach allowed me to observe the unfolding of practices and processes of urban experimentation and its consequences. Moreover, being present for a longer period of time allowed me to also illuminate how experiments fail, fade out or have unintended consequences. Therefore, it is important to get extended access to the process of constructing and practicing actual experiments as they unfold.

Observations are an important data collection method in this methodology of extensive ethnography, instead of merely conducting (in-depth) interviews and document analysis. The politics that result in the in- and exclusion of voices, interests, knowledges, or values, the shifting of responsibilities and the relationship with the institutional context, are more accurately perceptible through observations of actors' daily practices. For example, the observations that I conducted of COVID-19 decision-making and of the construction of an algorithm for preventing youth care, has given me in-depth insights into the ways in which interests, knowledges, and values were negotiated (or neglected) on the ground floor. These insights would not have surfaced as explicitly by conducting interviews alone, particularly because high-ranking actors such as executives and policymakers are trained in giving politically correct answers, especially in high stake situations like COVID-19 decision-making.

It is interesting to highlight how I got involved with the scenario team, as part of the safety authority in April 2020 during my research on COVID-19 decision-making. After observing a few of their team meetings, the head of the team asked me to participate in the meetings because they felt the team was lacking social science expertise and could therefore use my sociological input. Hence, observation turned into participation. This experience taught me that having the position of the 'objective observer' does not give any more valid or scientific insights. Instead, by becoming an embedded part of the research object generated more valuable insights. This gave ample room for reflection on my insights with actors in the research site, thereby increasing the validity of the findings. Moreover, giving research insights back to them had a direct impact on the knowledge production processes. Although the knowledge did not necessarily impact the decision-making process, it did contribute to creating a more reflexive space.

Reflections for further research

Future research regarding urban health experimentation would benefit from adopting a participatory action role in experimentation in order to contribute to a more just construction of a Healthy City, doing justice to its multiple interpretations and meanings. Precisely because the Healthy City is not straightforward it is important to seriously think about the conditions that are needed in order to give room to this plurality within experimentation and policymaking, and what role research can play in it. The COVID-19 scenario-team and the youth care experiences (through brainstorm sessions and costumer journeys) are examples of how a reflexive space was created to generate different knowledge for policymaking. While these examples did not yield any real outcomes for actual policymaking, they did provide a first step in giving room to different interests, knowledges, and values. Future (action) research should take on the task of developing this further.

An issue to study further is the fact that diversity has not been a focal point in the analysis of the case studies, although the urban context of this dissertation is characterized by superdiversity (Vertovec 2007). This is certainly not a blind spot. I am fully aware of academic debates surrounding race and discrimination in (urban) governance. Moreover, my interest in for example algorithmic governance was also personally informed. Algorithmic governance works with predictive risk models to single out individuals (or families) at risk of, for example, fraud or vulnerability. In the aftermath of the 'Childcare Allowance scandal', I received a letter by the state explaining that my name had been red flagged and processed into the fraud detection system. From the letter it became clear that my name had been red flagged in the year 2009, the year that my partner and I became 'fiscal' partners. The letter does not mention it, but my guess is that his last (non-Dutch) name, and his background as a second-generation immigrant, had something to do with it. While we did not experience any of the consequences other families did, it baffled me and made me more aware of the discriminatory biases within algorithms and hence, the possible dangers of algorithmic governance.

In my case studies I focused on the construction and decision-making processes regarding urban health experiments and did not study the effects of experiments on different groups in society. This does not mean however that race, gender, class, and intersections thereof were not at play within these construction processes of urban health experimentation. It is clear that the effects of experimentation will have specific consequences for different people. This was visible in the resilience experiment where policy did already reveal racialized and gendered outcomes (e.g., the prime example of resilience was a highly diverse 'mother' group and likewise, the voluntary work policy was certainly not executed by white middle-class men). The lab-makers in the context of the urban labs were primarily part of a so-called 'creative caste' which consists of primarily white, middle-class residents – although they did specifically aim to involve 'hard to reach' target groups. And in all cases, at times (small) racialized remarks were voiced in the background. Importantly, how this plays out and what the consequences thereof are, needs further scrutiny and as such, is subject to further research.

Final thoughts

The Healthy City discourse masks its underlying plurality and political components. Both what a Healthy City and an urban health experiment is, is dependent upon the interpretation given to them and on their implementation. Moreover, meanings of health and wellbeing are not the same for everyone. Therefore, in line with authors like Horstman and Knibbe (2022) and Frissen (2023), I argue that the Healthy City can take on many different forms. For example, a Healthy City could be operationalized as a city that provides a secure livelihood for all, a city that focuses on prevention of disease or one that focuses on individual health interventions. Every operationalization will contain different choices, assumptions, and practices, and will have different effects on different people. This shows the inherent plurality of the concept. This does not mean that urban health experiments are undesirable. However, given the political choices being made regarding the Healthy City, it is important that its plurality is embraced, discussed, and reflected upon. Hence, instead of throwing out the experimental baby with the bathwater, it means that there is a need to do more justice to urban health experiments by focusing attention on the political choices that underpin them – thereby re-politicizing the Healthy City.

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Summary

Cities have become the site of pressing environmental, economic, social, demographic and health challenges. Urbanism is seen as an important cause of these challenges, but at the same time the city is identified as the site par excellence for potential solutions. Urban experimentation is presented as a key mechanism for addressing these challenges in cities, involving bottom-up initiatives and collaborative efforts between different actors. These experiments are characterized by their focus on real-world problem solving, learning and innovation.

This dissertation approaches the city as a crucial site of experimentation, focusing on the Healthy City. The dominant Healthy City discourse seeks to enhance participatory and inclusive Healthy City practices, often framing urban health experiments as straightforward, democratic, and emancipatory practices. The literature has largely discussed urban experimentation in terms of high expectations and promise, as a wholesome enterprise in and of itself. However, urban health experiments involve navigating different values and interests, and are ultimately about resource allocation and how to construct the healthy - and good - life in cities. Studies have neglected to analyse experimentation as a question of governance, ignoring issues of power inequalities, conflicting values and interests in decision-making, and inclusion and exclusion processes. As a result, the normative policy choices and assumptions that underpin urban health experiments remain largely implicit while they have real consequences for how the Healthy City is given shape.

In this dissertation I studied urban health experiments in daily practice. The research question I addressed is: *"How are urban health experiments constructed as a governance practice and what are the consequences thereof?"*

This question is divided into three sub-questions:

1 *Who gets a say in urban health experiments and what does this mean for processes of in- and exclusion of voices, knowledges, and values?*
2 *How do urban health experiments reconfigure responsibilities between the (local) government and citizens?*
3 *How does the notion of 'free' experimentation relate to the institutional context in which urban health experiments take place?*

The research for this dissertation commenced in 2018 in the city of Rotterdam, a city in which urban experimentalism is very present, I took this specific city as a focal point because Rotterdam is often described as a (policy) laboratory, with the city priding itself for its experimental attitude described as "The laboratory of the Netherlands".

To gain empirical insights, I engaged in a multi-sited ethnography to explore the concept of the Healthy City. I do so because instead of one delineated place where health is 'done', the Healthy City takes form through different programs and policies. This ethnographic approach involved following urban health experiments, i.e., 'hanging out', observing and analysing diverse urban health projects, encompassing different discourses, policies, and programs. I studied different urban health experiments: (a) urban (health) labs, (b) a resilience program, (c) a 'workshop' developing algorithmic governance for youth care, and (d) COVID-19 decision-making. Although very different in form, their collective objectives revolved around experimentally building a resilient and Healthy City. I examined them to understand the processes of construction and practices of urban health experiments that bring into being the ideal of a Healthy City, and to what consequences. As a result, this dissertation on experimenting the Healthy City takes on the form of five chapters encompassing the Laboratory City, the Liminal City, the Resilient City, the Algorithmic City and the Pandemic City.

Crucially, I analysed these experiments as governance arrangements that reconfigure power relations and responsibilities between government, citizens, and other stakeholders. To this end, this dissertation highlights three components of the Healthy City: (1) how urban health experiments involve different processes of inclusion and exclusion, and thus prioritize some voices, knowledge and values over others; (2) how shifting responsibilities between governments and citizens can be empowering and energizing for some citizens, while proving precarious for others and can also background systemic underlying issues; and (3) how the dynamic interplay between each experiment and existing institutional contexts can inhibit free experimentation, thereby limiting the potential of alternative perspectives and practices to come to the fore in urban health experiments.

Who gets a say?

The first focus of the Healthy City analysed in this dissertation, highlights the importance of 'the right to the city' in shaping the Healthy City, emphasizing citizen involvement in urban governance. I highlight whose interests, knowledge, and values shape ideas of health and well-being. In doing so, I reveal mechanisms of inclusion and exclusion in experimenting the Healthy City. The different chapters and case studies in this dissertation provide ample examples of processes of in- and exclusions.

In the first case study (chapter 2) I used the concepts of imaginative work and city-making literacy to uncover who is able to participate in urban labs and what this means for how the urban environment is given shape. It showcases instances where actors in urban labs successfully integrate diverse values and knowledge into urban development processes, such as incorporating soft values like livability and social cohesion into urban planning or putting air quality on the (political) agenda. However, I also highlight that urban labs may not be inherently inclusive spaces and are often dominated by actors with backgrounds in design or architecture that know how to apply for subsidies, how to talk to civil servants and how to present their practices in convincing ways. This dominance limits the inclusion of lay residents and their perspectives on the Healthy City, for example resulting in experimental practices that primarily focus on redesigning public spaces rather than addressing broader social issues such as livelihood security or education.

Additionally, the case study on designing algorithmic governance for youth care (chapter 5), shows how qualitative data such as experiential knowledge of users and professionals was sidelined in favor of quantitative data. Costumer-journeys with users and co-creation sessions with professionals provided knowledge beyond individual factors, such as information regarding systemic issues related to a failing youth care system – e.g., waiting lists, mismatches between demand and supply of care, a lack of trust between youth care users and professionals, and increasing poverty and health inequalities. Although users and professionals identified these as important risk factors for youth care, the information was not included in the algorithmic tool. This was unfortunate as this knowledge could have provided alternative perspectives on the Healthy City, one related to the lifeworld, the needs, and concerns, of users and professionals instead of the existing youth care system.

Similarly, the COVID-19 case (chapter 6) prioritized specific knowledge. In this case decision-making resulted in prioritizing liability, prevention, and safety in terms of limiting infections over wellbeing, quality of life and societal stability. I used the concept of time frames to account for the process of the backgrounding of certain knowledge, interests, and values. Time was framed as 'no time to waste' requiring problem simplification and a single-minded focus on reducing infection rates. This resulted in the overshadowing and side-lining of other time frames that offered alternative, broader perspectives on decision-making and important questions such as 'who should show solidarity with whom', 'what kind of safety, and for whom' and 'what type of responsibility'. These questions remained largely unasked and unanswered. This obliged young people to show solidarity with the elderly and vulnerable. For example, the ban on socializing and gathering in public spaces or in groups was especially hard on (the mental health and wellbeing of) adolescents and similarly, families in a vulnerable position were not supported, despite concerns about deteriorating mental health and domestic abuse.

Overall, this sub question shows that while urban experiments involve diverse interests, values, and knowledge, not all voices are given equal consideration. Despite their potential for opening up debates on the Healthy City, these experiments often fail to actually incorporate this wide range of perspectives in practice.

Reconfiguring responsibilities

The second focus addresses the shifting responsibilities between governments and citizens. Across the different cases and chapters, the various initiatives illustrate diverse approaches to restructuring the relationship between citizens and local governments through experimentation. The analyses reveal how citizens, entrepreneurs, and organizations are increasingly encouraged to devise innovative solutions for pressing urban challenges, thereby affording citizens a platform to influence urban policies actively. However, concurrently, the configuration of these experiments increasingly assigns responsibilities to citizens. While this trend can be empowering and energizing for some citizens, it simultaneously proves precarious for others and moreover, can move systemic underlying issues to the background.

The exploration of urban labs (chapters 2 and 3) exemplifies this shift as citizens assumed roles previously held by local governments. For instance, in one of the urban labs that focused on health, wellbeing and solidarity in the neighbourhood, citizens organized themselves in a neighbourhood cooperation. Their goal was to increase the self-reliance and self-organizing potential of the neighbourhood and its citizens and to strengthen (social) infrastructures through the provision of (local) labour and services (e.g., grocery shopping, installing domestic tools for independent living etc.). These are activities that were once funded by (local) authorities and executed by healthcare organizations. Similarly, another urban lab empowered citizens to redesign public green spaces, thereby redistributing responsibilities that were traditionally under municipal social policy. These initiatives reveal a transition where citizens either assume or share responsibilities due to gaps in public service provision or a belief in their ability to organize more effectively.

The resilient city case (chapter 4) underscores the same shift in responsibilities, highlighting potentially precarious implications. Initiatives within this experiment aimed to empower residents by involving them in neighbourhood improvements and community involvement. For residents that are able to participate in this context, these new responsibilities can be stimulating and empowering. Simultaneously though, they can also intensify citizens' precarious positions. Women and volunteers, in particular, were tasked with the responsibility of ‘doing’ resilience. For example, by taking on additional responsibilities such as engaging in unpaid community work, educating families, and improving the safety of the neighbourhood. This underlines a shift of burdens onto those least equipped to challenge power imbalances.

Moreover, the inclusion of citizens in designing algorithmic tools for preventive youth care policy (chapter 5) aimed to foster shared responsibility for youth care in democratic ways. Eventually, the case study shows that the experiment neglected to reflect upon the problem definition and underlying assumptions of the youth care system. As such, the broader systemic context of youth care was neglected. Because the algorithmic tool ended up merely including known individual (risk) factors of youth care (such as ‘one parent family’, ‘language spoken at home’, ‘number of relocating home address’, ‘use of pre-school facility’), youth care was approached as a problem to be taken up through (better supporting) individual families, rather than as a systemic problem requiring the (local) government to look at their own role and moreover, to take responsibility to prompt systemic changes.

In short, urban health experiments and the way they shape the Healthy City, reconfigure responsibilities and the relationship between citizens and government. On the one hand this can result in initiatives citizens can benefit from. Crucially however, this shift warrants attention. Urban experiments can simultaneously result in neglecting or failing to address underlying issues and structures at stake. Moreover, these experiments can reveal a shift towards responsibilizing individual citizens and communities for activities that were previously addressed by (local) governments and as such they can, inadvertently, lead to governmental precarization: a situation in which uncertainty is maximised while security is minimised.

‘Free‘ experimentation and the institutional context

The third and last analytical focus of this dissertation emphasizes the complex relationship between institutional frameworks and urban health experiments. While existing frameworks can provide opportunities for innovation, they can also hinder the potential of these experiments to foster real change. Urban experiments aim to create a "space of exception," where normal rules and practices are temporarily suspended to allow for free experimentation. However, urban health experiments do not exist in a vacuum; they interact with existing policies and practices, leading to specific sometimes unintended consequences.

The case studies reveal that urban health experiments are deeply intertwined with institutional routines and regulations. This interaction has two major implications. First, existing policies and governance practices can limit the freedom experiments strive for. Second, the creation of a "space of exception" can lead to a so-called institutional void, creating risk for legitimate decision-making and accountability.

In chapters 2 and 3 I highlight the dual nature of urban lab practices. On one hand, initiators leverage the "urban lab" label to gain grants, freedom, and attention, allowing them to bypass standard procedures and policies to enable experimentation. On the other hand, the need for funding from national or local sources imposes constraints, as these funds often come with specific institutional focuses. For the urban labs under study for example, this resulted in a concentration on design and public spaces rather than social issues, due to the creative backgrounds of funding agencies and of those applying for funding.

Moreover, experimenting within certain institutional frameworks can lead to a value tradeoff between collaborating closely with policymakers and maintaining an autonomous activ-

ist stance, as discussed in Chapter 3. Close collaboration with institutional actors can result in being co-opted into standard policymaking, while maintaining distance can limit access to necessary resources and the ability to push for change. Therefore, initiators often navigate this tension by strategically using the lab's in-between status, positioning it as an intermediary between the system and life world, thus avoiding full capture by either side. However, this in-between status carries risks for legitimate decision-making and accountability. Without clear rules and norms, there can be a lack of inclusivity and dominance of specific voices, as shown in Chapter 2. Chapter 3 further reveals how institutional stakeholders can leverage their power to influence outcomes, often to the detriment of free experimentation and alternative political choices. For example, using the experiment to implement housing policies that benefit gentrified neighbourhoods rather than increasing access to social housing.

In chapters 4 and 5 I highlight how institutional practices, such as the use of key performance indicators and indexes, restrict experimental practices. For example, in the resilient city, the use of a safety index led to the displacement of a key actor that promoted open-ended experimentation. Similarly, the algorithmic governance experiment revealed a bias towards quantitative data, sidelining user experiences that could not be easily quantified. In both cases, the dominance of the existing policy framework (e.g., governing on the basis of quantitative indicators) hampered the inclusion of alternative voices, knowledges, and a sharing of responsibilities.

Likewise, the analysis of COVID-19 decision-making in chapter 6, demonstrates how the institutional framework prevented alternative approaches. This experimental public health endeavour shows how in a process of innovating 'on the go' under conditions of high perceived risk and high uncertainty, known and common institutional approaches dominated, sidelining alternative approaches despite efforts to broaden the measures taken to prevent the virus from spreading. The institutional context of the safety authority, responsible for managing the crisis, favored known methods. Existing institutional routines and regulations prevented the adoption of new approaches, thereby backgrounding alternative values and interests. As a result, there was a narrow focus on health-as-safety instead of health-as-wellbeing.
In sum, this sub-question shows that while municipalities aim to use urban health experimentation to drive innovation, the institutional context often limits the inclusion of alternative perspectives and practices and thereby prevent radical change.

The case studies in this dissertation focused on the construction and decision-making processes regarding urban health experiments and did not study the effects of experiments on different groups in society. This does not mean however that race, gender, class, and intersections thereof were not at play within these construction processes of urban health experimentation. It is clear that the effects of experimentation will have specific consequences for different people. The was visible in the context of the urban labs where the initiators were primarily part of a so-called 'creative caste' which consists of primarily white, middle-class residents – although they did specifically aim to involve 'hard to reach' target groups. The resilience experiment revealed racialized and gendered outcomes (e.g., the prime example of resilience was a highly diverse 'mother' group and likewise, the voluntary work was certainly not executed by white middle-class men). How this plays out and what the consequences thereof are, needs further scrutiny in further research.

Finally, this dissertation provides a necessary antidote to overly optimistic expectations of urban health experimentation as a straightforward framework for participatory and democratic spaces by default, and of the Healthy City as a malleable concept, by addressing the hidden politics and inherent plurality underlying urban health experiments. The Healthy City discourse masks its underlying plurality and political components. Both what a Healthy City and an urban health experiment is, is dependent upon the interpretation given to them and on their implementation. Moreover, meanings of health and wellbeing are not the same for everyone. The Healthy City can take on many different forms. For example, a Healthy City could be operationalized as a city that provides a secure livelihood for all, a city that focuses on prevention of disease or one that focuses on individual health interventions. Every operationalization will contain different choices, assumptions, and practices, and will have different effects on different people. This shows the inherent plurality of the concept. In this thesis, I have shown how current practices of the Healthy Cities movement primarily work towards more individualized instead of collective approaches. Bending this would mean that other values and other types of knowledge are taken into account.

Importantly, I emphasize that urban health experimentation is not undesirable, yet I stress the importance of embracing, discussing, and reflecting on its plurality and complexity and of taking on board other than individualizing approaches. Instead of throwing out the experimental baby with the bathwater, there is a need to do more justice to urban health experiments by focusing attention on the political choices that underpin the construction, practice, and governance of the Healthy City – thereby re-politicizing the Healthy City. Ignoring these aspects can lead to undesirable consequences in terms of the inclusion and exclusion of actors, interests, knowledge and values, the division of responsibilities, and the interaction with existing governance and policy frameworks. If practitioners really want to do justice to the multiple interpretations and meanings of the Healthy City for different people, and to push for (radical) change, it is vital that the underlying politics are recognized and articulated, and that important issues are addressed before, during and after any process of urban health experimentation.

Practically, this dissertation argues that in order for the in- and exclusion of different voices and expertise the stage for participation has to be set-up right. This is an important lesson, especially for example in the context of the Environmental and Planning Act (Omgevingswet). This is a new law (per 2024) combining and modernising laws for spatial planning, housing, infrastructure, the environment, nature, and water. It focuses on a healthy physical environment that meets the needs of society with a big focus on the need for citizen participation. Initiators of urban experiments have to consider how their set-up, or the 'staging' of the experiment, can be done in such a way that it incorporates different interests, knowledge, and values into the process. It is important to explicitly articulate and openly negotiate the underlying complexity and plurality during any initiative. This means explicating and acknowledging the different assumptions, interests, types of knowledges and values that different people bring to the table.

Crucially, the multiplicity of voices should be included in the early phase of problem definition, not merely in the design of solutions after the problem has been established.

As a result of this reflexive mode, the reconfiguration of responsibilities can be reflected upon as an issue of solidarity and a just sharing of responsibilities and capacities. This means acknowledging that not everybody can participate on governments' terms. Shifting responsibilities towards citizens can be an empowering and creative process for some but can be burdening for others. Reflecting on the underlying complexity of urban health experiments could prevent unjust and precarious outcomes.

Lastly, when aiming to 'make the impossible possible', initiators of urban experiments need to take into account the institutional context. Labelling a space of exception can have a performative effect but does not take the initiative out of its institutional context. Moreover, urban health experiments should not only be used to gain freedom but also to work on systemic changes. Therefore, the (legal) institutional framework and practices should be explicated to determine the extent to which they are allowed experimental freedom or to search for ways to work with the frameworks in order to allow for (radical) change.

Neglecting to address these complexities may inadvertently conceal the structures and systemic causes behind issues or the political implications embedded in experimental urban governance. As such, inadvertently, experiments can actually depoliticise issues in cruelly optimistic ways. Crucially, acknowledging and explicating the diversity of voices, interests, knowledges, and values does not guarantee equal justice for all; it inevitably involves certain trade-offs. However, by making assumptions and a range of choices explicit, actors can make well-informed decisions and opt for alternative courses of action.

In order to re-politicize the Healthy City, political discussions within urban health experiments should also be connected to broader democratic decision-making processes, such as in the local council. Moreover, thinking about the Healthy City should be connected to the classical political question regarding who gets what, when and why. This requires more reflexivity, for example from policymakers, aldermen etcetera, to make this happen to connect the micropolitics of the experiment with the larger politics of an institutional framework.

Samenvatting

Steden worden gezien als de plaats van urgente uitdagingen op milieu-, economisch, sociaal, demografisch en gezondheidsgebied. Verstedelijking wordt vaak gezien als een belangrijke oorzaak van deze uitdagingen, maar tegelijkertijd wordt de stad aangewezen als de plek bij uitstek voor mogelijke oplossingen. In deze context worden stedelijke experimenten gepresenteerd als een belangrijk mechanisme voor het aanpakken van problemen in steden, waarbij bottom-up initiatieven en samenwerkingsverbanden tussen verschillende actoren betrokken zijn. Deze experimenten worden gekenmerkt door hun focus op het oplossen van problemen in de echte wereld, leren en innovatie.

Dit proefschrift benadert de stad als een cruciale locatie voor experimenten in het kader van de Gezonde Stad. Het discourse van de Gezonde Stad tracht participatieve en inclusieve Gezonde Stad praktijken te versterken. Hierbij worden stedelijke gezondheidsexperimenten vaak voorgesteld als ongecompliceerde, democratische en emancipatoire praktijken. De literatuur bespreekt deze experimenten grotendeels in termen van hoge verwachtingen en beloften, als een heilzame onderneming op zich. Stedelijke gezondheidsexperimenten gaan echter gepaard met het navigeren tussen verschillende waarden en belangen, en gaan uiteindelijk over de toewijzing van middelen en hoe het gezonde - en goede - leven in steden kan worden opgebouwd. Over het algemeen hebben studies verzuimd om experimenten te analyseren als een bestuurspraktijk, met inbegrip van machtsongelijkheid, tegenstrijdige waarden en belangen in de besluitvorming, en in- en uitsluitingsprocessen. Als gevolg hiervan blijven normatieve beleidskeuzes en aannames die ten grondslag liggen aan experimenten grotendeels impliciet, terwijl ze reële gevolgen hebben voor de manier waarop de Gezonde Stad vorm krijgt.

In dit proefschrift bestudeerde ik stedelijke gezondheidsexperimenten in de dagelijkse praktijk. De onderzoeksvraag die ik stelde luidt: "Hoe worden stedelijke gezondheidsexperimenten geconstrueerd als bestuurspraktijk en wat zijn de gevolgen daarvan?". Deze vraag valt uiteen in drie deelvragen: (1) Wie krijgt zeggenschap in stedelijke gezondheidsexperimenten en wat betekent dit voor processen van in- en uitsluiting van stemmen, kennis en waarden?, (2) Hoe herconfigureren stedelijke gezondheidsexperimenten verantwoordelijkheden tussen de (lokale) overheid en burgers? en (3) Hoe verhoudt de notie van het 'vrije' experiment zich tot de institutionele context waarin stedelijke gezondheidsexperimenten plaatsvinden?

Het onderzoek voor dit proefschrift begon in 2018 in de stad Rotterdam, een stad waarin stedelijk experimentalisme zeer aanwezig is. Ik nam deze specifieke stad als focuspunt omdat Rotterdam vaak wordt beschreven als een (beleids)laboratorium, waarbij de stad zich laat voorstaan op haar experimentele houding en zichzelf soms uitroept tot "Het laboratorium van Nederland".

Om empirisch inzicht in het concept van de Gezonde Stad te verkrijgen, voerde ik een multisite etnografie uit, want in plaats van één afgebakende plek waar gezondheid 'gedaan' wordt

krijgt de Gezonde Stad vorm via verschillende programma's en beleid. Deze etnografische benadering bestond uit het volgen van stedelijke gezondheidsexperimenten. Dit betekende 'rondhangen' en het observeren en analyseren van diverse stedelijke gezondheidsprojecten die verschillende discoursen, beleid en programma's omvatten. Ik bestudeerde verschillende experimenten: (a) stadslabs, (b) een veerkrachtprogramma, (c) de ontwikkeling van een algoritme voor (preventie van) jeugdzorg, en (d) COVID-19 besluitvorming. Hoewel zeer verschillend in vorm, draaiden hun gezamenlijke doelstellingen om het experimenteel bouwen aan een veerkrachtige en Gezonde Stad. Ik heb ze onderzocht om de constructieprocessen en praktijken van stedelijke gezondheidsexperimenten te begrijpen die het ideaal van een Gezonde Stad tot stand brengen, en met welke gevolgen. Als resultaat heeft dit proefschrift over het experimenteren met de Gezonde Stad de vorm van vijf empirische hoofdstukken; de Laboratoriumstad, de Liminale Stad, de Veerkrachtige Stad, de Algoritmische Stad en de Pandemische Stad.

Cruciaal is dat ik deze experimenten analyseer als bestuursarrangementen die machtsverhoudingen en verantwoordelijkheden tussen overheid, burgers en andere belanghebbenden herconfigureren. Daartoe belicht dit proefschrift drie componenten van de Gezonde Stad: (1) hoe stedelijke gezondheidsexperimenten verschillende processen van insluiting en uitsluiting met zich meebrengen, en dus sommige stemmen, kennis en waarden voorrang geven boven andere; (2) hoe het verschuiven van verantwoordelijkheden tussen overheden en burgers voor sommige burgers empowerend en stimulerend kan zijn, terwijl het voor anderen precair blijkt te zijn en tevens systemische onderliggende problemen verhult; en (3) hoe de dynamische wisselwerking tussen het experiment en bestaande institutionele contexten vrije experimenteren kan remmen, waardoor het potentieel van alternatieve perspectieven en praktijken in stedelijke gezondheidsexperimenten kan worden beperkt.

Wie krijgt een stem?

De eerste focus van de Gezonde Stad die in dit proefschrift centraal staat, benadrukt het belang van 'het recht op de stad' bij het vormgeven van de Gezonde Stad. Ik benadruk het belang van wiens belangen, kennis en waarden worden meegenomen bij het vormgeven van ideeën over gezondheid en welzijn. Zo onthul ik mechanismen van in- en uitsluiting bij het experimenteren met de Gezonde Stad. De verschillende hoofdstukken of casestudies binnen dit proefschrift bieden een veelvoud aan voorbeelden van verschillende processen van in- en uitsluiting.

In de eerste casestudie (hoofdstuk 2) heb ik de concepten verbeeldend werk en stadsmakers-geletterdheid gebruikt om bloot te leggen wie in staat is om deel te nemen aan stadslabs en hoe dit de stedelijke omgeving vormgeeft. Het laat praktijken zien waarin actoren in stadslabs met succes diverse waarden en kennis integreren in stedelijke ontwikkelingsprocessen, zoals het opnemen van de zachte waarden leefbaarheid en sociale cohesie in stedelijke planning of het op de (politieke) agenda zetten van luchtkwaliteit. Ik benadruk echter ook dat stadslabs niet per definitie inclusieve ruimten zijn en vaak worden gedomineerd door actoren met een achtergrond in design of architectuur die weten hoe ze subsidies moeten aanvragen, hoe ze met ambtenaren moeten communiceren en hoe ze hun praktijken op een overtuigende manier kunnen presenteren. Deze dominantie beperkt de betrokkenheid van ‘gewone’ bewoners en hun perspectieven op de Gezonde Stad. Dit resulteert erin dat deze experimentele praktijken voornamelijk gericht zijn op het herinrichten van openbare ruimten in plaats van op bredere sociale kwesties zoals bestaanszekerheid of onderwijs.

Daarnaast laat de casestudie over het ontwerpen van een algoritme ter preventie van jeugdzorg (hoofdstuk 5) zien hoe kwalitatieve gegevens zoals ervaringskennis terzijde werden geschoven ten gunste van kwantitatieve gegevens. Klantreizen met gebruikers en co-creatiesessies met professionals leverden kennis op die verder ging dan individuele factoren ten aanzien van jeugdzorg, zoals informatie over systemische problemen die gerelateerd zijn aan een falend jeugdzorgsysteem zoals wachtlijsten, mismatches tussen vraag en aanbod van zorg, een gebrek aan vertrouwen tussen jeugdzorggebruikers en professionals, en toenemende armoede en gezondheidsverschillen. Hoewel gebruikers en professionals dit als belangrijke risicofactoren voor jeugdzorg zagen, werd deze informatie niet opgenomen in de ontwikkeling van het algoritme. Dit was zonde omdat deze kennis alternatieve perspectieven op de Gezonde Stad had kunnen bieden, een perspectief dat gerelateerd is aan de leefwereld, de behoeften en zorgen, van gebruikers en professionals in plaats van aan het bestaande jeugdzorgsysteem.

Op eenzelfde manier gaf de COVID-19 casus (hoofdstuk 6) prioriteit aan specifieke kennis en waarden. Besluitvorming in deze casus resulteerde in het prioriteren van veiligheid in termen van het beperken van infecties, aansprakelijkheid en preventie boven welzijn, kwaliteit van leven en maatschappelijke stabiliteit. Ik gebruikte hier het concept van tijdskaders om het proces van het op de achtergrond raken van bepaalde kennis, belangen en waarden te verklaren. In dit geval werd tijd gezien als 'geen tijd te verliezen', wat een vereenvoudiging van het probleem en een doelgerichte focus op het terugdringen van het aantal infecties vereiste. Dit resulteerde in het overschaduwen en opzijschuiven van andere tijdsframes die alternatieve, bredere perspectieven op besluitvorming boden en als zodanig bleven belangrijke vragen zoals 'wie moet solidair zijn met wie', 'wat voor soort veiligheid en voor wie' en 'wat voor soort verantwoordelijkheid' grotendeels onbesproken en onbeantwoord. Dit verplichtte jongeren om solidair te zijn met ouderen en kwetsbaren. Zo was bijvoorbeeld het verbod op samenkomen in openbare ruimten of in groepen vooral moeilijk voor (de geestelijke gezondheid en het welzijn van) adolescenten, en werden gezinnen in een kwetsbare positie niet gesteund, ondanks zorgen over een verslechterende geestelijke gezondheid en huiselijk geweld.

Over het algemeen laat deze deelvraag zien dat, hoewel stedelijke experimenten verschillende belangen, waarden en kennis verkennen, niet alle stemmen evenveel aandacht krijgen. Ondanks hun potentieel om debatten over de Gezonde Stad te openen, slagen deze experimenten er vaak niet in om een breed scala aan perspectieven en waarden te integreren.

Veranderende verantwoordelijkheden

De tweede analytische focus is gericht op de verschuivende verantwoordelijkheden tussen overheden en burgers. In de verschillende cases en hoofdstukken illustreren de verschillende

initiatieven verschillende benaderingen voor het herconfigureren van de relatie tussen burgers en lokale overheden door middel van experimenten. De analyses laten zien hoe burgers, ondernemers en organisaties steeds meer worden aangemoedigd om innovatieve oplossingen te bedenken voor urgente stedelijke uitdagingen, waardoor burgers een platform krijgen om actief invloed uit te oefenen op stedelijk beleid. Tegelijkertijd legt deze verschuiving steeds meer verantwoordelijkheden bij burgers. Hoewel deze trend empowerend en stimulerend kan zijn voor sommige burgers, is het tegelijkertijd precair voor anderen en kan het bovendien systemische onderliggende problemen naar de achtergrond verdringen.

Het onderzoek naar de stadslabs (hoofdstuk 2 en 3) illustreert deze verschuiving doordat burgers rollen overnemen die voorheen door lokale overheden werden vervuld. In een van de stadslabs bijvoorbeeld, dat zich richtte op gezondheid, welzijn en solidariteit in de buurt, organiseerden burgers zich in een buurtcoöperatie. Hun doel was om de zelfredzaamheid en het zelf-organiserend vermogen van de buurt en haar burgers te vergroten en om de (sociale) infrastructuren te versterken door het leveren van hulp en diensten (zoals boodschappen doen, het installeren van hulpmiddelen voor zelfstandig wonen et cetera), activiteiten die voorheen werden gefinancierd door (lokale) overheden en uitgevoerd door zorgorganisaties. Op dezelfde manier gaf een ander stadslab burgers de macht om openbare groene ruimten in te richten en te onderhouden, waardoor verantwoordelijkheden die van oudsher onder gemeentelijk sociaal beleid vielen, werden verschoven. Deze initiatieven laten een beweging zien waarbij burgers verantwoordelijkheden op zich nemen vanwege gaten in publieke dienstverlening of vanwege het geloof in hun vermogen om zich effectiever te organiseren.

De veerkrachtige stad casus (hoofdstuk 4) onderstreept eenzelfde verschuiving in verantwoordelijkheden en benadrukt daarbij potentieel precaire implicaties. Initiatieven binnen dit experiment waren erop gericht bewoners te empoweren door ze te betrekken bij buurtverbeteringen en de gemeenschap. Voor bewoners die in deze context kunnen participeren, kunnen deze nieuwe rollen stimulerend en versterkend zijn. Tegelijkertijd kunnen ze echter ook de precaire posities van burgers versterken. Zo kregen vooral vrouwen en vrijwilligers de verantwoordelijkheid om veerkracht te 'doen'. Bijvoorbeeld door verantwoordelijkheden op zich te nemen, zoals het verrichten van onbetaald buurtwerk, het begeleiden van gezinnen en het verbeteren van de veiligheid in de buurt. Dit laat een verschuiving van lasten zien in de richting van degenen die het minst zijn toegerust om machtsonevenwichtigheden aan te vechten.

Bovendien was het betrekken van burgers bij het ontwerpen van een algoritmisch instrument voor preventief jeugdzorgbeleid (hoofdstuk 5) gericht op het bevorderen van gedeelde verantwoordelijkheid voor jeugdzorg op een democratische manier. Uiteindelijk laat de casestudie zien dat, ondanks pogingen daartoe, het experiment er niet in slaagde om te reflecteren op de probleemdefinitie en onderliggende aannames van het jeugdzorgsysteem. Daardoor bleef de bredere systemische context van de jeugdzorg onbesproken. Omdat het algoritmisch instrument uiteindelijk alleen bekende individuele (risico)factoren van jeugdzorg opnam (zoals 'eenoudergezin', 'moedertaal', 'aantal verhuizingen', 'gebruik van voorschoolse voorziening'), werd jeugdzorg benaderd als een probleem dat moest worden opgepakt via (betere ondersteuning van) individuele gezinnen, in plaats van als een systemisch probleem waarbij de (lokale) overheid naar haar eigen rol moest kijken en bovendien verantwoordelijkheid moet nemen om systemische veranderingen teweeg te brengen.

Kortom, stedelijke gezondheidsexperimenten en de manier waarop ze de Gezonde Stad vormgeven, herconfigureren verantwoordelijkheden en de relatie tussen burgers en overheid. Enerzijds kan dit resulteren in initiatieven waar burgers hun voordeel mee kunnen doen. Echter, deze verschuiving behoeft ook aandacht. Stedelijke experimenten kunnen er tegelijkertijd toe leiden dat onderliggende problemen en structuren worden genegeerd of niet worden aangepakt. Bovendien laten deze experimenten een verschuiving zien naar de verantwoordelijkheid van individuele burgers en gemeenschappen voor activiteiten die voorheen werden aangepakt door (lokale) overheden en als zodanig kunnen ze, onbedoeld, leiden tot precarisering door overheidsbeleid: een situatie waarin onzekerheid wordt gemaximaliseerd terwijl zekerheid wordt geminimaliseerd.

Het 'vrije' experiment binnen de institutionele context

De derde en laatste analytische focus van dit proefschrift benadrukt de complexe relatie tussen institutionele kaders en stedelijke gezondheidsexperimenten. Hoewel bestaande kaders mogelijkheden bieden voor innovatie, kunnen ze ook een belemmering vormen voor het potentieel van experimenten om echte verandering teweeg te brengen. Stedelijke experimenten zijn erop gericht om een "uitzonderingsruimte" te creëren waar normale regels en praktijken tijdelijk worden opgeschort om vrije experimenteren mogelijk te maken. Stedelijke gezondheidsexperimenten bestaan echter niet in een vacuüm; ze staan in wisselwerking met bestaand beleid en bestaande praktijken, wat leidt tot specifieke gevolgen. De casestudies in dit proefschrift laten zien dat stedelijke gezondheidsexperimenten sterk verweven zijn met institutionele routines en regelgeving. Deze interactie heeft twee belangrijke gevolgen. Ten eerste kunnen bestaand beleid en bestuurspraktijken de vrijheid die experimenten zoeken beperken. Ten tweede kan het creëren van een "uitzonderingsruimte" leiden tot een zogenaamde institutionele leegte, waardoor legitieme besluitvorming en verantwoording in gevaar komen.

In hoofdstuk 2 en 3 benadruk ik de tweeledige aard van de praktijken van stadslabs. Aan de ene kant gebruiken initiatiefnemers het label "stadslab" om subsidies, vrijheid en aandacht te krijgen, waardoor ze standaardprocedures en beleid kunnen omzeilen. Aan de andere kant legt de financiering uit nationale of lokale bronnen beperkingen op, omdat deze fondsen vaak gepaard gaan met specifieke institutionele doelstellingen. Voor de onderzochte stadslabs resulteerde dit bijvoorbeeld in een concentratie op design en openbare ruimten in plaats van op sociale kwesties, vanwege de creatieve achtergronden van de financierende instanties en van degenen die financiering aanvroegen.

Bovendien kan experimenteren binnen bepaalde institutionele kaders leiden tot een waarde afweging tussen nauwe samenwerking met beleidsmakers en het handhaven van een autonome activistische houding, zoals besproken in hoofdstuk 3. Nauwe samenwerking met institutione-

le actoren kan resulteren in coöptatie in de standaard beleidsvorming, terwijl het bewaren van afstand de toegang tot noodzakelijke middelen en de mogelijkheid om aan te dringen op verandering kan beperken. Initiatiefnemers gaan hier mee om door strategisch gebruik te maken van de tussenstatus van het lab. Door het te positioneren als een intermediair tussen het systeem en de leefwereld wordt coöptatie voorkomen door een van beide voorkomen. Deze tussenstatus brengt echter risico's met zich mee voor legitieme besluitvorming en verantwoording. Zonder duidelijke regels en normen kan er een gebrek aan inclusiviteit ontstaan en kunnen specifieke stemmen domineren zoals blijkt uit hoofdstuk 2. Hoofdstuk 3 laat verder zien hoe institutionele belanghebbenden hun macht kunnen aanwenden om de uitkomsten te beïnvloeden, vaak ten koste van vrije experimenten en alternatieve (politieke) keuzes. Bijvoorbeeld door het experiment te gebruiken om huisvestingsbeleid te implementeren dat ten goede zou komen aan gegentrificeerde buurten in plaats van de toegang tot sociale huisvesting te vergroten.

In hoofdstuk 4 en 5 laat ik zien hoe institutionele praktijken, zoals het gebruik van belangrijke prestatie-indicatoren en indexen het experiment beperken. In de veerkrachtige stad bijvoorbeeld leidde het gebruik van een veiligheidsindex tot de verdringing van een belangrijke speler binnen experiment. Op dezelfde manier liet het experiment met algoritmisch bestuur een voorkeur voor kwantitatieve gegevens zien, waardoor gebruikerservaringen die niet eenvoudig gekwantificeerd konden worden op een zijspoor werden gezet. In beide gevallen belemmerde de dominantie van het bestaande beleidskader (in dit geval het besturen op basis van kwantitatieve indicatoren) het opnemen van alternatieve stemmen, kennis en het delen van verantwoordelijkheden.

Op dezelfde manier laat de analyse van de COVID-19 besluitvorming in hoofdstuk 6 zien hoe het institutionele kader alternatieve benaderingen in de weg stond. Deze experimentele inspanning op het gebied van de volksgezondheid laat zien hoe in een proces van 'on the go' innoveren onder omstandigheden van hoog risico en grote onzekerheid, bekende en gangbare institutionele kaders domineerden. Ondanks pogingen om de maatregelen die werden genomen om verspreiding van het virus te voorkomen te verbreden, werden hierdoor alternatieve benaderingen op een zijspoor gezet. De institutionele context van de veiligheidsregio, die verantwoordelijk was voor het beheersen van de crisis, gaf de voorkeur aan bekende methoden. Bestaande institutionele routines en regels verhinderden de invoering van nieuwe benaderingen, waardoor alternatieve waarden en belangen op de achtergrond raakten. Als gevolg daarvan was er een beperkte focus op gezondheid-als-veiligheid in plaats van gezondheid-als-welzijn.

Samenvattend laat deze deelvraag zien dat hoewel gemeenten stedelijke gezondheidsexperimenten willen gebruiken om innovatie te stimuleren, de institutionele context vaak de opname van alternatieve perspectieven en praktijken beperkt en daarmee daadwerkelijke verandering tegenhoudt.

De casestudies in dit proefschrift richtten zich op de constructie- en besluitvormingsprocessen met betrekking tot stedelijke gezondheidsexperimenten en onderzochten niet de effecten van experimenten op verschillende groepen in de samenleving. Dit betekent echter niet dat

etniciteit, geslacht, klasse en intersecties daarvan geen rol speelden in deze constructieprocessen. Het is duidelijk dat de effecten van experimenten specifieke gevolgen hebben voor verschillende mensen. Dit was zichtbaar in het veerkrachtexperiment, waar het beleid al raciale en genderspecifieke uitkomsten liet zien (het eerste voorbeeld van veerkracht was bijvoorbeeld een diverse 'moeder'-groep en evenzo werd het vrijwilligerswerk niet uitgevoerd door witte mannen uit de middenklasse). De initiatiefnemers in de context van de stadslabs maakten voornamelijk deel uit van een zogenaamde 'creatieve klasse' die voornamelijk bestaat uit witte middenklasse, hoewel ze er specifiek naar streefden om 'moeilijk bereikbare' doelgroepen te betrekken. Hoe dit verder uitspeelde en wat de gevolgen ervan zijn is een onderwerp voor toekomstig onderzoek.

Tot slot biedt dit proefschrift een noodzakelijke ontnuchtering betreffende al te optimistische verwachtingen van stedelijke gezondheidsexperimenten als een eenduidig kader voor participatieve en democratische ruimten, en van de Gezonde Stad als een maakbaar concept. De analyse geeft zicht op de verborgen politiek en inherente pluraliteit die ten grondslag liggen aan stedelijke gezondheidsexperimenten. Wat een Gezonde Stad en een stedelijk experiment zijn, hangt af van de interpretatie die eraan wordt gegeven en van de uitvoering ervan. Bovendien zijn betekenissen van gezondheid en welzijn niet voor iedereen hetzelfde. De Gezonde Stad kan veel verschillende vormen aannemen. Een Gezonde Stad kan bijvoorbeeld worden geoperationaliseerd als een stad die iedereen bestaanszekerheid biedt, een stad die zich richt op ziektepreventie of een stad die zich richt op individuele gezondheidsinterventies. Elke operationalisering zal diverse keuzes, aannames en praktijken bevatten en zal verschillende effecten hebben op verschillende mensen. Dit laat de inherente pluraliteit van het concept zien.

Stedelijke experimenten worden vaak gepresenteerd als katalysator voor transformatie. Het uitnodigen van verschillende actoren om te experimenteren leidt echter niet automatisch tot het opnemen van verschillende stemmen in (beleids)processen, tot een rechtvaardige verdeling van verantwoordelijkheden of tot vrij experimenteren. Ik benadruk hierbij dat stedelijke gezondheidsexperimenten niet onwenselijk zijn, maar dat het belangrijk is om de pluraliteit en complexiteit ervan te omarmen, te bespreken en erover na te denken en om andere dan individualiserende benaderingen over te nemen. In plaats van het experimentele kind met het badwater weg te gooien, is het nodig om meer recht te doen aan stedelijke gezondheidsexperimenten door de aandacht te richten op de politieke keuzes die ten grondslag liggen aan de constructie, de praktijk en het bestuur van de Gezonde Stad, en zo de Gezonde Stad te politiseren.

Praktisch gezien betoogt dit proefschrift dat de set-up van participatie goed moet worden opgezet, zodat verschillende stemmen en expertise ingesloten kunnen worden. Dit is een belangrijke les, ook bijvoorbeeld in de context van de Omgevingswet. Deze nieuwe wet (per 2024) combineert en moderniseert verschillende wetten voor ruimtelijke ordening, wonen, infrastructuur, milieu, natuur en water. Het richt zich op een gezonde fysieke omgeving die voldoet aan de behoeften van de samenleving met een grote focus op burgerparticipatie. Initiatiefnemers van stedelijke experimenten moeten nadenken over hoe hun opzet, of de ‘staging’ van het experiment, zo kan worden uitgevoerd dat verschillende belangen, kennis en waarden in het

proces worden opgenomen. Het is belangrijk om tijdens elk initiatief de onderliggende complexiteit en pluraliteit expliciet te benoemen en er openlijk over te onderhandelen. Dit betekent dat de verschillende veronderstellingen, belangen, soorten kennis en waarden die verschillende mensen ter tafel brengen, expliciet gemaakt en erkend moeten worden. Cruciaal is dat de veelheid aan stemmen wordt meegenomen voor, tijdens en na elk proces van het experiment, niet alleen in het ontwerp van oplossingen nadat het probleem is vastgesteld.
Als gevolg van deze reflexieve modus kan de herconfiguratie van verantwoordelijkheden worden gezien als een kwestie van solidariteit en een rechtvaardige verdeling van verantwoordelijkheden en capaciteiten. Dit betekent dat erkend moet worden dat niet iedereen op de voorwaarden van de overheid kan participeren. Het verschuiven van verantwoordelijkheden naar burgers kan voor sommigen een stimulerend en creatief proces zijn, maar is voor anderen belastend. Nadenken over de onderliggende complexiteit van stedelijke gezondheidsexperimenten kan onrechtvaardige en precaire uitkomsten voorkomen.

Tot slot moeten initiatiefnemers van stedelijke experimenten bij hun streven om 'het onmogelijke mogelijk te maken' rekening houden met de institutionele context. Het labelen van een uitzonderingsruimte kan een performatief effect hebben, maar haalt het initiatief niet uit zijn institutionele context. Bovendien moeten stedelijke gezondheidsexperimenten niet alleen gebruikt worden om vrijheid te krijgen, maar ook om te werken aan systemische veranderingen. Daarom moeten het (juridische) institutionele kader en de praktijken worden geëxpliciteerd om te bepalen in hoeverre ze experimentele vrijheid toestaan of om te zoeken naar manieren om met de kaders te werken om (radicale) verandering mogelijk te maken.

Als deze complexiteit niet aan de orde komt, kunnen de structuren en systemische oorzaken achter problemen of de politieke implicaties van experimenteel stedelijk bestuur onbedoeld verborgen blijven. Zo kunnen experimenten onbedoeld kwesties op optimistische wijze depolitiseren. Cruciaal is dat het erkennen en expliciteren van de diversiteit aan stemmen, belangen, kennis en waarden geen gelijke rechtvaardigheid voor iedereen garandeert; het gaat onvermijdelijk gepaard met bepaalde afwegingen. Door aannames en een reeks keuzes expliciet te maken, kunnen actoren weloverwogen beslissingen nemen en voor alternatieve handelwijzen kiezen.

Om de Gezonde Stad te politiseren, moeten politieke discussies binnen stedelijke gezondheidsexperimenten bovendien worden verbonden met bredere democratische besluitvormingsprocessen, zoals de gemeenteraad. Bovendien moet het denken over de Gezonde Stad worden verbonden met de klassieke politieke vraag wie wat krijgt, wanneer en waarom. Dit vereist meer reflexiviteit, bijvoorbeeld van beleidsmakers, wethouders enzovoort, om dit te realiseren en de micropolitiek van het experiment te verbinden met de grotere politiek van een institutioneel kader.

Academic Curriculum Vitae

COURSES

WTMC (Netherlands graduate research school of Science, Technology and Modern culture)

2018 Doing comparison (spring workshop)
2018 Infrastructures (summer school)
2018 SMART (fall workshop)
2019 Experimenting, or trying to change the world with STS (summer school)
2022 WTMC write shop

Erasmus Graduate School of Social Sciences and the Humanities (egsH)

2019 Great Thinkers of the 20th Century
2019 Participatory action research

Other

2017 Basic didactics, RISBO
2021 Pre-conference PhD-workshop (2 days) Sociology of Risk and Uncertainty, ESA

PRESENTATIONS

2018 *Urban labs as resilience practices* European Association for the Study of Science and Technology (EASST), Lancaster

2019 *Urban Labs. Imaginative work in the city* Society for Social Study of Science (4S), New Orleans

2019 *Urban Labs. Imaginative work in the city* Dag van de Sociologie, Amsterdam

2019 *Urban Labs. Imaginative work in the city* Beyond Smart Cities Today, LDE Center for BOLD Cities, Rotterdam

2020 *Prototyping the Resilient City* Society for Social Study of Science (4S) / European Association for the Study of Science and Technology (EASST), Prague (online)

2021 *Temporalities of Covid-19 responses: how time influences public values and responsibilities within decision-making* Association of Social Anthropologists of the UK (ASA), online

2021 *Governing the pandemic city: Temporalities of Covid-19 responses or how time influences public values and responsibilities within decision-making* Nordic STS, (online)

2021 *Anticipating uncertain futures: pandemic modelling and healthcare governance of COVID-19* Society for Social Study of Science (4S), Toronto (online)

2021 *Governing the pandemic city: Temporalities of Covid-19 responses or how time influences public values and responsibilities within decision-making* European Sociological Association (ESA), Barcelona (online)

2022 *Governing the pandemic city: Temporalities of Covid-19 responses or how time influences public values and responsibilities within decision-making* Society for Social Study of Science (4S), Cholula, Mexico

2022 *Dreaming of the Algorithmic City*
Society for Social Study of Science (4S), Cholula, Mexico

AWARDS

2023 Best Conference Paper 2022, Graduate School Award for PhD Excellence, graduate School of Social Science and Humanities, Rotterdam for the paper: *The clocks run at slightly different speeds. Clashing time-frames in COVID-19 health risk governance* presented at 4S conference Cholula, Mexico in 2022.

PEER REVIEWED PUBLICATIONS

de Graaff, B., Rahmawan-Huizenga, S., Bal, J., Kuijper, S., Zwart, L., Kalthoff, K., ... & Bal, R. 10. sturing van zorg tijdens een meervoudige crisis. *De sociologie en de pandemie*, 126.

de Graaff, B., Huizenga, S., van de Bovenkamp, H., & Bal, R. (2023). Framing the pandemic: Multiplying "crises" in Dutch healthcare governance during the emerging COVID-19 pandemic. *Social Science & Medicine*, 115998.

Huizenga, S., Oldenhof, L. van de Bovenkamp, H., and Bal, R. (2023) Governing the Resilient City. An empirical analysis of governing techniques. *Cities: The International Journal of Urban Policy and Planning*.

Huizenga, S., van de Bovenkamp, H., Oldenhof, L. and Bal, R. (2023) The clocks run at slightly different speeds. Clashing time-frames in COVID-19 health risk governance. *Journal of Health, Risk & Society*

Oldenhof, L., Rahmawan-Huizenga, S., van de Bovenkamp, H. & R Bal (2020) - The Governance Challenge of Urban Living Laboratories: Using Liminal 'In-Between' Space to Create Livable Cities

Rahmawan-Huizenga, S. & Ivanova, D. (2022) - THE URBAN LAB: Imaginative Work in the City- *International Journal of Urban and Regional Research*, 46 (4), 542-557.

Oldenhof, L., Rahmawan-Huizenga, S., van de Bovenkamp. H. and Bal. R. (2023). Stadslabs als experimentele tussenruimte: nieuwe waardenafwegingen in stedelijke ontwikkeling.

Ivanova, D., & Huizenga, S. (2023). Imagineering the city: the living lab mystique and its discontents. *Journal of Science Communication*, 22(3), Y02.

PUBLIC DEBATE

Sabrina Rahmawan-Huizenga, Hester van de Bovenkamp, Lieke Oldenhof & Roland Bal (2021) - Conflicterende tijdslogica's in besluitvorming over Corona. https://stukroodvlees.nl/conflicterende-tijdslogicas-in-besluitvorming-over-corona/

Lieke Oldenhof, Sabrina Rahmawan-Huizenga & Hester van de Bovenkamp (2021) - Nieuwe 'tussenruimtes' voor ontmoeting in de wijk: het potentieel van labs, hubs en werkplaatsen. https://adviezen.raadrvs.nl/ruimte-maken-voor-ontmoeting/plekken/

REPORTS

Bert de Graaff, Sabrina Huizenga, Jenske Bal, Syb Kuijper, Martijn Felder, Lotte Zwart, Karin Kalthoff, Hester van de Bovenkamp, Iris Wallenburg & Roland Bal (2022) - Leren dansen met een virus: Sturen van een meervoudige crisis in de zorg.

Bert de Graaff, Sabrina Huizenga, Hester van de Bovenkamp, Syb Kuijper, Iris Wallenburg & Roland Bal (2022) - Naar een veerkrachtig zorgsysteem: lessen uit de pandemie

TEACHING ACTIVITIES

Pre-master zorgmanagement
2018 “Kwalitatief leeronderzoek” Workgroup tutor

Bachelor Health sciences, Erasmus University Rotterdam
2019 “Zorg en Welzijn” Workgroup tutor
2020-2022 Intervision, Workgroup tutor

Master Health, Economics, Policy and Law (HEPL)
2018-2024 Governing Healthy Cities (elective), Tutor, lecturer and since 2021 coordinator
2020-2023 Thesis supervision

Erasmus University College (EUC)
2018-2024 Governing Healthy Cities (elective), tutor, lecturer and since 2021 coordinator

Dankwoord

*“I want to thank me for believing in me, I want to thank me for doing all this hard work. I want to thank me for having no days off. I want to thank me for never quitting. I want to thank me for trying to do more right than wrong. I want to thank me for being me at all times, I am a bad motherf**ker,”.*

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Hester en Lieke, mijn (co-)promotoren, ik kan jullie eigenlijk niet los van elkaar beschrijven (alhoewel dat misschien best makkelijk is: de een ordelijk, de ander wat chaotisch). Jullie zijn heel anders en van jullie beide heb ik andere dingen geleerd. Jullie, maar ook wij, waren echt een team en ik kan de een niet los zien van de ander. Jullie voelen het al aankomen en ik ga het inderdaad zeggen, “het kan ook nooit normaal”. Begeleidingsgesprekken begonnen standaard met zaken die niets met het proefschrift te maken hadden, en dan hadden we vaak nog maar even tijd om toch echt even naar het werk te kijken. Gelukkig was dat altijd ‘spot on’.

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About the Author

Sabrina was born in Rotterdam. She was originally trained as an art therapist (BSc.) and later obtained a master's degree in urban education (MA). Professionally, Sabrina worked first as a social worker with families and then as a policy advisor for a care organization. At a later point in her life, she started a master's degree in sociology at Erasmus University Rotterdam, where she also worked as a tutor. In 2018, she started a PhD trajectory at the Erasmus School of Health, Policy and Management. During her PhD trajectory she lectured, designed, and coordinated the master course Governing Healthy Cities and supervised master thesis students. During the Corona crisis, she participated in the two-year study on COVID-19 decision-making called 'Dancing with a virus' (ZonMw) with Prof. dr. Roland Bal. In general, Sabrina's work and research revolves around care, wellbeing and/in the city, and she feels most comfortable conducting discourse analysis and ethnographic research methods. Sabrina deliberately did not undertake any extra-curricular PhD activities, as 'doing a PhD' while raising two children means juggling more than five balls in the air. Instead, practicing yoga seemed a much more complementary activity.

In 2023, she worked as a post-doctoral researcher with Prof. dr. Anouk de Koning at Leiden University, studying new state-citizen relations. She is currently working on the same topic at the Netherlands Institute for Social Research (Sociaal en Cultureel Planbureau). She lives in Rotterdam with her two wonderful children Ise and Son and her husband Dhani.