Learning Opportunities for Municipalities to Leverage the Urban Sustainability Transitions:

The Contribution of Social Entrepreneurial Organizations



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Abstract

The rise of social entrepreneurial organizations in the context of urban development presents a promising avenue for addressing the sustainability transitions of cities. The thesis aims to discover the learning potential of municipalities from social entrepreneurial organizations, by focusing on three key activities of an urban development project (framing, convening, and multivocality). Through the comparison between the approach of Dutch municipalities and social entrepreneurial organizations, the thesis identifies that the innovative problem-solving practices of social entrepreneurial organizations offer valuable insights for municipalities on how to overcome the syndromes of conventional problem-solving enforced by public institutions. The data is collected through semi-structured interviews with public officials and representatives of social entrepreneurial organizations and analyzed using a comprehensive coding framework based on the scientific literature. The findings highlight the effectiveness of social entrepreneurs in reframing urban challenges, engaging diverse stakeholders, and harnessing resources creatively. The thesis offers tangible recommendations for municipalities that can enhance their strategies for the sustainability transitions of the urban environments, through citizen empowerment, collaborative resource pooling, and designing appealing solutions for a diversity of stakeholders.

Introduction

The events of the last few years made it abundantly clear that the global societal challenges we are facing have prominent local manifestations. The changing weather conditions started to test more and more the resilience of the built infrastructure, but also the populations living in the urban environments. Heatwaves, heavy rainfalls, polluted air, the ill connection between the different parts of the city, segregation among the different neighborhoods, and the opportunities the people face living there are just a few examples that urge us to do things differently (OECD 2019). Doing things directly in the context of urban development is also referred to as a transition towards more sustainable urban systems, which include changes in the infrastructure, policies, and most importantly in the perception of people living in cities to reduce the environmental impact of our activities (Brömmelstroet, et al. 2022; Gallo and Marinelli 2020).

The smart city model has become popular in the public discourse, and it is also considered to contribute to the sustainability transitions of our cities with the help of digital technologies. In a smart city, the primary focus falls on the use of ICTs to strengthen the city ecosystem and connect the stakeholders working and living together to create a more sustainable and higher life quality in the urban environment (Jessica Clement 2022).

The concept of the smart city introduces that the connection of the different stakeholders is primarily technology-driven, with local governments trying to implement different sorts of ICTs to solve some of the urban challenges their city is facing. However, the model doesn't offer a tangible way of fostering collaboration and driving community engagement to success, and recent critiques also look at it as a strategy that delays transition instead of bringing forward real change in the urban environments. (Brömmelstroet, et al. 2022; Matos-Castaño 2024). Alongside this, it is important to note that positioning stakeholder collaboration and community engagement primarily on technological bases runs the risk of enforcing techno-fixes to inherently social problems, which will eventually further complicate the situation. (Geenen, et al. 2023). A good example of this situation is when the smartness of the city inevitably pushes certain social groups to be marginalized because they don't have the needed digital skills to operate in the new technical systems that were intended to solve an urban challenge of the city (Lukács 2023).

There is a need to start thinking about solutions that have the potential to transform urban living sustainably, without the undesired effects of the different smart interventions. Nevertheless, already existing good examples are being conveyed by social entrepreneurial organizations, or putting it differently, businesses who strive to have a net-positive impact besides profit generation. As Rebecca Henderson points out in her book, it is important more than ever that businesses and other types of organizations start focusing on creating a net-positive impact in society besides profit generation (Henderson 2021), which means that the responsibility to solve societal challenges does not only fall on governments anymore. Even though there is not a widely agreed definition for social entrepreneurship, in his article, Nicola M. Press framed the concept as "a process involving the innovative use and combination of resources to peruse opportunities to catalyze social change and/or address social needs" (Pless 2012).

The approach of social entrepreneurial organizations has shown us promising ways of dealing with wicked challenges through an entrepreneurial mindset while also finding tangible solutions to social problems such as hunger or poverty. A great example of a social entrepreneurial organization that managed to solve a pressing issue with a local intervention is the WastedLab (Pinar Sefkatli 2017) in Amsterdam. In short, WASTED was a local project in Amsterdam Noord to integrate local community members in redefining the value of the plastic waste they generated. Residents of the neighborhood were able to donate their plastic trash that got recycled into building blocks they could later use to build items that enrich the local community. As an incentivizing mechanism for people to join the project, after they contributed to some plastic waste, they earned digital coins that they could use to buy goods from local businesses. The initiative was a collaboration between the WASTED Lab and the municipality of Amsterdam (Pinar Sefkatli 2017), and it showcases a great example of the type of problem approach that prioritizes the reframing of what we

perceive as being the problem, into an opportunity that is creating further positive side effects. In the case of WASTED, they took the problem of having too much plastic trash, they incentivized the local community to take the extra effort and bring their garbage to a collection point in return for some coins they could use in local shops (this also boosted the local economy) and with little extra work they also created useful items for the neighborhood, and it was a common decision how to use them.

The research aims to highlight the potential learning opportunities for local governments who face the complexity of designing urban development projects that can effectively foster the sustainability transitions of cities, by comparing their approach with the approach of social entrepreneurial organizations. This will result in a set of recommendations for local governments where they can review their processes and learn from the best practices presented by social entrepreneurial organizations.

Additionally, it is important to highlight the role of design in this matter. It is a discipline that plays a role in almost all segments of society, as it has been understood by Herbert Simon as well, in his work "Science of Design" (Huppatz 2015). Simon, to unify the social sciences with problem-solving, argued that "everyone designs who devises courses of action aimed at changing existing situations into preferred ones" (Simon 1996, pp. 111). According to Holierhoek and Price (Holierhoek Sophie Elisa 2019), in the last few years, its importance in the public domain became more significant, for a set of reasons: the problems that we face as a society are more and more interrelated; public trust in the political leaders is shrinking; and design as a discipline has also been elevated from the project and operational subject matters into a more strategic action that can serve as a reform in multiple transdisciplinary cases (Holierhoek Sophie Elisa 2019).

This marks the social and scientific relevance of the thesis because the research aims to draw a connection between the discipline of Public Administration and Business with the help of comparing the design process of the two organizations in urban development projects.

The research question of the thesis is:

What can local governments learn from social entrepreneurial organizations to foster the sustainability transition of our cities?

The sub-questions of the research

- 1. What are the differences in the approach of municipalities and social entrepreneurial organizations towards tackling urban challenges?
- 2. Which specific elements employed by social entrepreneurial organizations contribute to the effectiveness of their urban development projects in fostering sustainability transitions?
- 3. How to translate the effective, but context-dependent elements used by social entrepreneurial organizations in their interventions into learning opportunities for the municipalities?

The paper is structured as follows: After the topic of urban sustainability transitions has been introduced the theory section will present the different elements that are important in this context. This will show what is needed for the mutual learning between the two types of organizations (local governments and social enterprises) to happen. The theory section also contributes to the creation of the research methodology. The methods section will describe the data collection, the framework for the analysis, the operationalization strategy, the reliability of the research, and the validity of the measurements. This will be followed by the findings and discussion section, where the results of the analysis are presented. Finally, the conclusion will answer the research question and the subquestions.

Theory

The transformations that need to come across, or put it differently, the lack of sustainable living makes the reality of cities full of challenges. Organizations, both public and private who are involved in the problem arena of urban challenges, are now faced with an urgent need to mobilize their problem-solving practices, but they have to learn (and they usually do it the hard way), that the problems that we have in front of us now, cannot be approached in the same way that we approached them in the past (Dorst 2015). This is not because we have collectively lost our ability as a society to solve the challenges that we are facing, but because the nature of these challenges is significantly different now. The problems that we face nowadays are "so open, complex, dynamic and networked, that they seem impervious to solution" (Dorst 2015, pp. 1).

At the same time, the rise of the digital revolution brought high expectations worldwide to coordinate the challenging playing field better, and making cities smarter became the new standard to start tackling the pressing urban issues. However, the promise of digitalization in our cities can be misleading, because, in reality, we did not identify a way of dealing with the new types of problems, we just found a potential loophole where we hopefully don't have to change the ways we think and approach challenges, but we can make them disappear completely, with the help of our digital technologies (Brömmelstroet, et al. 2022). However, making the challenges disappear doesn't bring us closer to the sustainable transformation that cities must undergo. To exemplify this phenomenon, let's look at the case of mobility. As Brömmelstroet, et al. (2022) highlight in their article, the current mobility practices utilized in our urban environments are fast-paced, and they possess the characteristic of rapidly depleting individuals, resources, and the environment. This means that mobility is framed by people as a necessary, but not useful or valuable transition-time between two activities, that needs to be as fast and efficient as possible, so we can move on to our next important task that results in economic growth. To be able to create a more sustainable transportation system, inevitably, a change in this way of thinking is needed. We need to find a new meaning for our mobility system in a way that will stop exploiting people, nature, and resources. However, the majority of the interventions can only be regarded as cosmetic adjustments and so-called 'smart' technofixes informed by modernistic approaches (Brömmelstroet, et al. 2022), instead of changing our perception of what else urban mobility could mean to us. These 'smart' techno-fixes of a smart city promise to address most of the urban challenges, but they can easily lead to one-dimensional, top-down practices that limit the creativity and capacity of the stakeholders to meet the conceptual needs of transition (Matos-Castaño 2024). The transition requires the radical transformation of our mobility systems, which needs to be a collective effort to reimagine the futures that are desirable for society and, more importantly to the local communities of cities (Brömmelstroet, et al. 2022).

Due to the urgent nature of the urban challenges, local governments tend to focus on quick technological fixes, which also made the concept of smart cities popular among city administrations. A city is considered smart when investments in human and social capital are equally important, coupled with traditional and modern infrastructure that promotes sustainable economic growth and high quality of life for the citizens (Jessica Clement 2022).

The Dutch government also developed a national Smart City strategy (NL Smart City Strategie, 2016; Geenen 2023), where they rely on Big data, sensor networks, and AI (Artificial Intelligence) to monitor, manage, and control aspects of urban living, such as crowd control, safety, waste level in public bins or waste collection routes and times (Geenen 2023). The employment of digitization and datafication of services is the solution for a future society, where 70% of the global population lives in cities, and city services need to be provided for everyone. The sensors and algorithms are fed with data, produced by inhabitants and collected from the different parts of the city and this is seen to be creating the basis for the oversight of the urban environment (Feng and Wang 2024; Geenen 2023, p. 16).

Contrary to all the potential benefits that a fully automized and algorithmic city could provide, the underlying idea that a computed and centrally controlled city is the way towards a better, more just, and

happier urban life is very hard to believe. There are multiple reasons for this, the first one being the growing evidence that basing our fundamental social problems on a technological solution will not necessarily fix them (Jessica Clement 2022). Digital technologies are still relevant tools in finding efficient ways of creating urban sustainability and improving the quality of urban life, but the building blocks of a socially cohesive and future-proof smart city require different approaches than digitalization only (Jessica Clement 2022).

The nature of the contemporary problems and the syndromes of conventional organizations

Municipalities are urged to find tangible ways of creating sustainable practices, with the desired economic well-being and in a socially cohesive way. To create frames for the urban challenges that will bring across contextually relevant and suitable solutions, one needs to understand the nature of these contemporary problems (the urban challenges) and the syndromes of the institutions that are at the forefront of solving them.

The connection between urban challenges and contemporary challenges is more pronounced than one would think. The 21st century is labeled as the urban century, with more than half of the world's population living in cities (World Bank Group 2023; Keivani 2009), issues like climate change, growing disparities among the parts of society, or energy transition have very significant local manifestations.

Therefore, the nature of the contemporary problems needs to be understood, as the first building block of sustainable transitions. Kees Dorst puts forward a hands-on classification for the contemporary challenges in his book Frame Innovation. He claims that the challenges that our society faces can be grouped into four categories: open, complex, dynamic, and networked problems (Dorst 2015).

The openness of a problem refers to the phenomenon when the boundaries cannot be clearly defined, or it is easily permeable. Anything considered to lie outside the boundaries of a problem is called the "context" and it is not being taken into account anymore when thinking about the problem. An open problem refers to the problem situation when it is unclear where the circle that detaches it from the context should be drawn. By excluding elements that later on prove to have an important role in understanding the problem, we may position ourselves in a complicated situation with further problems arising. (Dorst 2015)

The complexity of a problem refers to the many different elements that are contained in one single problem, with complicated interactions among them. The drawback of the many interrelations is that deciding on a subsequent area of the problem can easily cause other chain effects that will have an impact on the whole system. Therefore, the problem is very hard to split up into smaller chunks and it needs to be approached as a whole, with every element being considered at the same time. (Dorst 2015)

A dynamic problem situation is prone to changes anytime a new element is added or a change is made in the connections (for example by shifting priorities). These changes can be slow processes such as cultural changes or newly emerging technologies that influence the playing field in a certain societal challenge. (Dorst 2015)

A networked problem refers to a situation when the different problems are influenced by each other. These are scenarios when an action of a seemingly irrelevant stakeholder has significant effects on the dynamics of the problems that one was trying to solve. (Dorst 2015)

Understanding the nature of the contemporary challenges, underscores once more that smart cities as a concept on its own is not going to be enough. In many cases instead of fast-tracking transition with the more efficient digital processes, we are just preventing the real change from coming along. As demonstrated in the example about the mobility systems (Brömmelstroet, et al. 2022), the issue is that the understanding of the real problem arena is faulty. Another example that supports this is put forward by Enrique Penalosa, the former mayor of Bogota, Colombia. He wrote in his book that "An advanced city is not one where the poor own an electric car, but one where the rich use the public transport" (Londoño 2024). Although the

book has been written in the context of a socially cohesive and just city, the same reasoning could be used for the case of sustainable or economic transitions as well. The way how society frames the challenges we are facing in an urban environment is the preceding factor of the solutions that we implement (Dorst 2015; Montgomery, et al. 2012).

Furthermore, it is important to understand the syndromes of the actors who are tasked to come up with solutions for these challenges. Local governments are the moving mechanism of the transition that we envision for ourselves, although their approach to problem-solving in many cases still follows the procedure that closed, simple, static, and non-networked problems require. This will inevitably create further complications and unintended outcomes that might make the challenges bigger and harder to solve. Understanding the problem-solving practices and the driving mechanisms of these organizations helps in understanding the approach they are using to design solutions for urban problems.

Once again, the framework presented by Kees Dorst in his book (Dorst 2015) Serves an adequate basis, however, these characteristics have been underscored by other researchers as well (Barquet, et al. 2022; Fietz and Günther 2021; Köhler, et al. 2019).

The first syndrome of a conventional organization is the "Lone Warrior". This refers to the situation when one major party considers itself as the problem owner, therefore they also need to be in the driving seat of the solution (Dorst 2015). This syndrome has been mentioned in the article written by Köhler J. et al. when they highlight that transitions are inherently political processes, and they come with inevitable disagreements across parties and actors that have a stake in it (Köhler, et al. 2019). Transition is a process that requires multiple organizations to get on board, the parties who initiated the change (in this context, they are often the local municipalities) might feel that their approach is under threat, because of the growing crowd of problem solvers. This is when they start exercising their power to protect their position and vested interests (Köhler, et al. 2019).

The second syndrome is called "Freeze the World". It refers to the conventional problem-solving method that bases its understanding on a static world, where time can be stopped, the problem can be isolated, and a singular solution can be found. However, this approach is not realistic for the challenges our society faces today (Dorst 2015). As has been highlighted by Barquet et al., sustainability transitions cannot be achieved by a decision-making approach that has an interest in maintaining the status quo (Barquet, et al. 2022), because that will just stall the emergence of a solution. A sign that refers to the usage of such a problem-solving approach is the endless lines of research and working group discussions before a project is allowed to start (Dorst 2015).

The "Self-made box" is the third characteristic of a conventional organization. This state refers to being reluctant to innovate the internal processes that are much needed for problem-solving. The sentence of "Think outside the box" may sound familiar, and these are the particular situations when stepping out of the predefined way of thinking is very much needed. It is important though to realize that the box has been fully self-made and self-sustained by the organization itself, thus the reluctance to innovate or change the ways of thinking and approaching a problem is only dependent on the members of the organization (Dorst 2015).

The final syndrome is "Shaping your identity around the established practices". The previously mentioned, deeply embedded problem-solving practices can have a different effect on the perception of the members of the organization. After some time spent inside and being thought into the well-established patterns of thinking and acting, it becomes very easy for individual actors to frame these practices as the culture of the organization. The culture is known to be the direction for the goals of the organization, for the structures, processes, core values, practices, and the accepted definition of what quality means to them. This unrealistic connection between the way of problem-solving and the culture can easily become part of the DNA of an organization, which is very hard to change later on (Dorst 2015). As Fietz and Günter also highlight this phenomenon in their paper, organizational culture has a significant effect on how members understand and

frame the challenges that the organization is facing, and this proves to be a drawback for the implementation of the corporate environmental management initiatives for example (Fietz and Günther 2021).

The rise of unconventional organizations

After the need for transition, and the elements that can prevent that from happening have been discussed, it is important to focus on a second element of the smart city literature, that only started to gain popularity recently. Cross-sectoral collaboration, or in other words, collaboration among the stakeholders of the city is a necessary component besides the use of ICTs (Jessica Clement 2022). This includes a partnership between the government, businesses, non-governmental organizations, and the local communities. While stakeholder engagement is key to finding success in the domain of modern urban development, engaging communities of like-minded people is also considered a powerful tool one can use to drive systematic change in a specific area that needs intervention (Montgomery, et al. 2012). In the past, we could already witness the rise of social movements from new customer needs, when the underlying challenge has been framed to create more responsible consumption patterns, such as the emergence of wind energy (Montgomery, et al. 2012).

However, it is important to highlight that some of the most successful movements, that create traction for a lot of people living in the urban settlement, are not created by the local governments. The stories of individuals or groups of individuals who are tired of the inability of governmental interventions to meet the social needs of their citizens and who do not believe in the loud, scandal-ridden corporate world, are showing real potential in making cities desirable (Pless 2012). These people operate under the name of Social Entrepreneurial Organizations, to create sustainable solutions and not sustainable advantages and develop solutions that encompass empowerment instead of control as a core value (Pless 2012). By studying the phenomena of Social Entrepreneurs more closely, one can see that the elements that have been mentioned earlier as important building blocks of a successful smart city implementation are also represented in their work. Collective social entrepreneurship is a collaboration between like-minded and different stakeholders to apply business principles to solve social problems (Pless 2012).

Solving challenges from a cross-sectoral perspective is also regarded as a potential approach to overcoming the socio-technical challenges in the context of digital governance (Jessica Clement 2022). Whilst stakeholder collaboration is crucial to address such complexity, different design practices also take a prominent role in the work of social entrepreneurial organizations. The application of different design approaches offers a new perspective on the challenges at hand and allows these organizations to look at the contemporary problems according to their nature, with an organizational approach that is equipped to tackle what we are facing. It is important to mention that these organizations are also keen on exploring how new technologies can address the volume of complexity of an urban problem (Ferraris, et al. 2020).

After a substantive study on the way of working of these organizations, researchers highlighted that social entrepreneurs' work can be differentiated from other organizations on the level of three key activities that every urban development project needs: framing (creating sets of beliefs that are action-oriented and get individuals onboard on their mission), convening (convincing groups of individuals to engage in collective action and collaboration over a social matter) and multivocality (employing multiple lenses and approaches to design solutions that are beneficial for a variety of people) (Pless 2012). Here, the collective nature of their work is a key factor in achieving success because within and outside their sector, social entrepreneurial organizations often share and exchange complementary resources, which allows them to combine power and expertise (Montgomery, et al. 2012). This collective action makes them better able to reach and communicate with a broader set of stakeholders, than they would be capable of doing on their own (Montgomery, et al. 2012).

The theoretical framework of the thesis can be constructed based on the combination of the above-presented notions. Municipalities are facing the challenge of finding solutions for contemporary urban problems, but their organizational structure is not always adequate to deal with this, because of the syndromes that conventional organizations established in their way of operating. Social Entrepreneurial organizations are 'unconventional' organizations, because of the different approaches they take on three key activities that drive urban development: framing, convening, and multivocality. Therefore, understanding what these organizations do differently in these three key activities of problem-solving can offer municipalities the learning opportunities to overcome the syndromes of conventional organizations and become agents of change for the sustainability transitions.

Based on this, the next section of the thesis will describe the methodology that is used to test the hypothesis and answer the research question.

Methodology

Strategy and design

Finding the answer to the research question requires a close observation and analysis of the differences in the approach local governments and social entrepreneurial organizations take when designing smart city projects that are meant to contribute to the sustainability transition of cities. The conceptual framework of the research is based on the theoretical foundation presented in the literature review. The aim is to find out what is needed for the sustainable transition of cities, therefore, the comparison will be done on the level of three key activities that each urban development project consists of: framing, convening, and multivocality. Municipalities and social entrepreneurial organizations will be analysed based on their approach to understanding urban challenges, creating an interpretation for them with action-oriented beliefs and meanings, and designing solutions that deliver for different stakeholders in the city environment. By looking at these three key activities the problem-solving practices of the two types of organizations will be described to see if their established routines, and the conventions they work with help them or not to get closer to solving the new types of urban problems.

The data that is needed to describe the nature of these organization's key activities is acquired through semistructured interviews, conducted with public officials from Dutch cities and with representatives of social entrepreneurial organizations who operate in the context of Dutch cities, aiming to solve urban challenges with their activities. Based on an established set of codes, the interview data is organized into findings about the approach and the problem-solving practices of the two different organizations, which later will be compared to find the learning opportunities. Table 1 visualizes the methodological steps of the research.

Table 1The methodological steps of the research

Steps	Description	Method
Literature Review and Theoretical Foundation	Review existing literature on smart cities and the sustainability transitions of cities	Literature review
Research Design	Refine the research question and objectives Identify key activities for analysis	Refine research question, identify key activities
Data Collection	Design semi-structured interviews Conduct interviews with public officials from Dutch municipalities Conduct interviews with social entrepreneurial organizations who work in the context of urban development in the Netherlands	Semi-structured interviews
Data Coding and Organization	Establish a set of codes for the analysis	Establish codes, organize data

	Organize interview data into themes		
Data Analysis	Analyse approaches of municipalities and social entrepreneurial organizations on the level of the three key activities	Analyze approaches, compare interpretations	
	Compare interpretations and action-oriented beliefs		
Comparison and Interpretation	Compare problem-solving practices Identify routines and conventions Highlight learning opportunities	Compare practices, identify routines, highlight opportunities	
Findings and Conclusions	Summarize key findings Discuss implications for policy and practice Provide recommendations for future research	Summarize findings, discuss implications, provide recommendations	

The three key activities of an urban development project

The three key activities of an urban development project derives from the academic literature. The activities of framing, convening and multivocality has been highlighted as the three steps of a project, where social entrepreneurial organizations managed to give a distinctive character to their work (Montgomery, et al. 2012). Based on this, the comparison of the approach between municipalities and social entrepreneurial organizations will be done on the level of these three key activities.

Framing

The sustainable transition of cities means the radical transformation of the different systems that combine into an urban ecosystem (e.g. the mobility system, the system of waste collection, the water retention system, and urban planning) (Brömmelstroet, et al. 2022). This transformation can only manifest if there is a collective effort invested into the reimagination of the desirable urban future scenarios (Brömmelstroet, et al. 2022; Matos-Castaño 2024). This includes the evaluation of the problem itself and also of the solution that has been implemented for it previously (Dorst 2015, p. 60).

The process of framing lies in the center of an urban development project that aims to contribute to the sustainable transition of a city because it explains how ideas and challenges are interpreted and how solutions are constructed to create collective action and mobilize people (Montgomery, et al. 2012, p. 382). Frames are complex tools for thought that will steer exploration and solution creation during a design project (Dorst 2015, p. 63). A frame is a social and cultural entity that can synchronize the thoughts and understandings of the different stakeholders who are involved in the problem situation (Dorst 2015; Montgomery, et al. 2012). Table 2 showcases the elements and the qualities of a frame:

 Table 2

 The elements and the qualities of framing

Frame	Elements (Montgomery, et al.	Qualities (Dorst 2015)
	A frame contains: - An action-oriented set of beliefs and meanings; - A schema for interpretation; - Transformational ideas for social and cultural meanings; - Elements that build legitimacy for the stakeholders of the problem situation; - Elements that make an impact on the public perception; - Resonance and solidarity for the public and the collaborators; - Elements that are credible but still outstanding.	Constructive frames: - Create an overarching image that integrates a wide range of issues into the problem consideration; - Are coherent and they create a clear basis to think further and build upon; - Provide a "common ground" for all the participants that are involved in the process of problem-solving; - Are inspiring and original, but not completely new to the world, to still create mutual understanding; - Are engaging, so participants will find it easy to think along and build the solutions.

Convening

The radical transformation of the different ecosystems, besides collective efforts of reimagining futures, also requires a large amount of resources. Convening refers to the activity when an individual or an organization is able to navigate complex boundaries, open up the chance for collaboration, and tap resources, knowledge, and expertise. (Montgomery, et al. 2012). This also shows how the three key activities build upon each other. A well-established, credible, engaging, and inspiring frame plays a key role in the process of getting organizations on board with one's mission, which will be the key to gathering the resources that are crucial for a successful project outcome.

The process of convening consists of three phases. The first phase is outreach, when the core issues, the goal of the collaboration, and the communication form among the participants is established (Montgomery, et al. 2012). The outreach is followed by collective learning when the participants of a problem situation establish a shared understanding of the issues and start combining their knowledge to create a collaborative information base for the project (Montgomery, et al. 2012). Finally, the process ends with co-creating the solution together and designing the joint action if necessary (Montgomery, et al. 2012).

Convening is especially important when an organization faces an open, complex, dynamic, and networked problem because the uncertainty around the problem arena inevitably needs a set of skills that is unrealistic to be owned by one single actor. From a strategic standpoint, therefore, it makes sense to mobilize partners

who can collectively bring knowledge, skill sets, and best practices to be able to fulfill the need for change (Montgomery, et al. 2012). Convening is an activity that can be done across different levels of the same sector organizations (e.g. between the regional and the local government), because these individuals or entities can look at different levels of a problem, but also among cross-sectoral organizations (e.g. non-governmental organizations and businesses), because the individuals or entities from a different domain can employ a different lens on the challenge at hand.

Multivocality

Multivocality is the ability to combine multiple voices across multiple lenses to help overcome institutional barriers that stop large-scale social change from happening (Dorst 2015; Montgomery, et al. 2012). Its success depends on the frame of a certain challenge or urban problem that has been created by the group of organizations that joined forces on a common mission to solve that particular societal issue. Having a reliable group of organizations with the same mission and vision over a certain issue, allows them to use the diversity of their voices to connect with a larger audience, in an appealing manner (Montgomery, et al. 2012).

Multivocality is especially important in the context of a local problem-solving arena, because in cities, groups of people live very close to each other, even though they have different lenses when looking at the historical and cultural events that have an impact on how they see their current urban realities or the future of their city life (Montgomery, et al. 2012). To ensure that the transition that a city undergoes is indeed sustainable from all three perspectives of sustainable development, multivocality plays a key role in connecting the different communities in this battle, through the ability of the leading organizations to engage with them on their different levels of understanding life and with this, creating social cohesion.

Data collection

The interviews

As it has been mentioned previously, the data collection for the comparison happened through semistructured interviews. Representatives from Dutch municipalities and social entrepreneurial organizations were invited to describe the processes their organization is using for problem-solving and to design projects that contribute to the sustainability transition. Since the focus group of the interviews operates in two different sectors of society, the interview protocol slightly deviates between the two organizations, to be able to get the necessary understanding of their processes, within their operational context. The focus will lie on the three key activities, but the questions will be tailored to the context the organization operates in to be able to find relevant results. Table 3 below offers information about the participants of the interview, the type of organization they are part of, and their roles and experience in the field. The information has been anonymized to maintain the privacy of the interviewees.

Table 3

Thesis interviews

Interviewee	Type of organization	Person's role in the organization	Experience
Anonymus Interviewee 1	Municipality	Chief Resilience Officer	The person was the first to initiate the climate adaptation program of his city, which has now grown into the Climate Resilience Program.

Anonymus Interviewee 2	Municipality	Senior Strategic Advisor for Long-term Planning on urban ecological transitions	Involved in the topics of sustainability transitions from 4 main perspectives: climate change adaptation, energy transition, circular economy, and nature-inclusive city. Lately, also been involved in the financial sector to make public expenditure more
Anonymus Interviewee 3	Municipality	Policy Director Sustainable Economy & Broad Prosperity	sustainable. Part of the advisory team of the Economic Affairs Department of the municipality, invested in topics like the sustainable economy, social entrepreneurship, and broad wellbeing
Anonymus Interviewee 4	Municipality	Senior Advisor/ Project Leader Urban Planning	Has been involved with urban greening for a long time within the context of the municipality, to support the bottom-up initiatives coming from the local citizenry.
Anonymous Interviewee 5	Social Entrepreneurial organization	Director of the Organization	Advocate of urban sustainability practices, for the past 8 years, part of the organization whose aim is to bring nature back to cities through green roofs.
Anonymus Interviewee 6	Social Entrepreneurial organization	Founder and Director of the Organization	Involved in different initiatives in the last 5 years that promote the importance of sports for the citizens of her city, and in the last years she started her own philanthropic social entrepreneurial venture to bring sports closer to people who cannot afford it.
Anonymous Interviewee 7	Social Entrepreneurial organization	Senior Fundraiser & Partnerships	Experienced fundraiser for a non-profit organization that is aimed at offering protection, warmth, and

			dignity to homeless people living in cities and other areas.
Anonymus Interviewee 8	Social Entrepreneurial organization	Founder of the Programme	She founded the urban greening program in 2005 from a bottom-up approach to involve citizens in the act of giving space back to nature in the city.
Anonymus Interviewee 9	Social Entrepreneurial organization	Program Manager	With a background in water management and civil engineering, he is the manager of the climate adaptation program run by the city but operates like a social entrepreneurial organization with the aim of cooperating with citizens.

Interviews- Dutch municipalities

The participants for this set of interviews have been chosen through a simple internet search with the aim of finding public officials who are involved in the level of strategic planning at any level of sustainable transition. There have been 4 participants found who were willing to participate in the interview and their work focused on the topics of resilience, sustainable economy, broad well-being, long-term planning for climate adaptation, energy transition, circular economy, nature inclusivity, and urban greening.

The interview protocol used for the case of the Dutch municipalities focused on the three key activities (framing, convening, and multivocality), with special attention on how the organization understands the urban challenges they are facing and how they engage with city stakeholders to be able to talk to a diverse group of citizens with their interventions. Besides that, the interview questions also focused on their practices of citizen engagement, to see how the city is able to deliver the needs of its inhabitants. The connection between the vision and mission of the municipality in a specific area of intervention has also been investigated. Finally, another important element of the interviews was the role of digital technologies in contemporary Dutch urban development, to see what is the approach of these organizations to the concept of Smart cities. A set of questions can be seen below that has been asked during the interviews, but since it has been a semi-structured discussion, questions have also been added to the protocol based on how the conversation unfolded.

Table 4Interview Protocol- Municipalities

Interview question	Relevance	
What is the urban challenge you are trying to solve	The question is aimed at understanding what the	
with your work?	urban challenge is.	
How does the municipality interpret that	This question builds upon the previous one, to	
challenge?	understand how the municipality frames the	
	problem situation they are facing.	

What is the vision of the municipality on the level	The vision is interpreted as how the city wants to
of this challenge?	see the problem situation being changed after a
	certain amount of time when the necessary
	interventions have been implemented.
What are the key activities of the municipality to	Understanding the key activities allows the
solve this challenge?	researcher to draw the connection between the
	vision and the mission of the municipality, over a
	particular challenge.
What is the role of digital technologies in solving	To understand how the concept of smart cities is
the challenge?	manifested in real life.
What is the role of city stakeholders in the	The relevance of this question ties in with the
solution?	harnessing of the resources. As it has been
	mentioned previously, cross-sectoral and multi-
	level collaboration is crucial to acquire the
	necessary resources for transition.
What is the role of the citizens in the solution? How	This question also highlights the process of
was this role defined?	resource harnessing, but it also shows the efforts of
	the municipality to assert more personal agency in
	the citizens to help combat the urban challenges.
How is the needs of the different target groups of	It shows the efforts of the municipality to
the city taken into account in the design process of	understand what the understanding of the citizens
the interventions?	of a particular urban challenge is, and based on
	what social and cultural elements did they
	construct their current view on reality.

Interviews- Social Entrepreneurial organizations

Choosing participants for this set of interviews has been done in the same process as in the case of municipalities. After an internet search has been conducted, different social enterprises have been approached with the request to engage in a conversation about their problem interpretation, solution, and practices of engaging with different stakeholders and the citizens of the city. The group of participants who agreed to do an interview consists of 5 individuals who work in the topics of urban greening, social cohesion, urban climate resilience, urban poverty, circularity and homelessness, all of them working in a different city in the Netherlands. Two out of the 5 social enterprises have also disseminated their activities in other cities, and one of them also operating in other countries, however, this is not relevant to the research.

The interview protocol has been focused again on the three key activities (framing, convening and multivocality), with the aim of understanding the goal of organization and urban challenge from where their idea originates from. The connection between the vision and mission of these social entrepreneurial organizations has been also questioned, together with their strategy of engaging with other stakeholders and citizens. The role of technology in their projects has been also a subject of the interview, to be able to derive some conclusions on the understanding of the two institutions over this matter. Two bonus questions have been asked in these interviews that are aimed at discovering some further learning potential for municipalities. One of these questiones focused on how an organization can adapt to the changing environment of problem solving and the other one was aimed to discover what the individuals leading these social entrepreneurial organizations see being the secret ingredients of the sustainable urban transition.

Table 5

Interview Protocol- Social Entrepreneurial Organizations

Interview question	Relevance
What is the social entrepreneurial venture about	Understanding their reason for existance and the
and what is its goal/focus? When was it founded?	goals they have set out for themselves to achieve
	through their activities.
Where does the idea originate from? What is the	Their understanding of the particular urban
underlying urban challenge?	challenge that they are dedicated to solve with their
	activities.
How do you understand the challenge? What is the	What is the interpretation of the challenge that they
framing used?	created to get other organizations on board and
	start having an impact.
How do you collaborate with the city stakeholders?	The way they harness the neccesary resources they
	need for the transition and achieving their goals.
Is there any collaboration between the social	To see if there is support from municipalities or
entrepreneurial organization and the municipality?	not.
How do you work together with citizens?	Understanding the role they see for citizens in the
	solution.
Over the years of your existence, did you have	This question is aimed to show the extra learning
moments when you felt like you were hitting rock	potential municipalities can have from social
bottom and you needed to change how you work in	entrepreneurial organization on an organizational
order not to deviate from your goal?	level.
As a changemaker, what is one thing you would	Secret ingredients that are needed for the
like to highlight as a crucial ingredient for	transformation, based on the experience of the
sustainable transition for our cities?	local heroes that are involved in transition.

Ethical considerations

The research involves the individuals and public and private organizations that operate in the context of Dutch urban development. The aim of the research is to find the learning opportunities for municipalities to contribute more effectively to the sustainability transitions, and to connect important stakeholders and lived experiences within the urban environment that creates collaboration and cohesion. An ethical request to conduct the interviews has been submitted and approved. To protect the privacy of the individuals who agreed to partake in the data collection, the interviews are anonymized and only findings that are related to the three key activities and the problem-solving practices of these organizations are revealed.

It is also important to highlight the personal biases that might have an effect on the outcome of the research. My professional training is in the field of Public Administration, and the vested interests in this topic comes from my passion towards city life and from the realization that governmental action in many cases is not well-equipped to face the wicked urban challenges of our times. By being also interested in the nature and possibilities that entrepreneurial ventures can offer in the development of our urban areas, I decided to look for learning opportunities that local governments can have from the social entrepreneurial organizations. One limitation of the thesis is that the learning opportunities are only investigated from one direction, namely what municipalities can learn from social entreprises, even though there might be mutual experiences to share.

Data analysis

The data that has been collected through the interviews was analyzed based on the important elements of the sustainability transitions of cities, presented by the theory chapter of the thesis. To find the learning potential of municipalities from the social entrepreneurial organizations in the context of sustainable urban development, a coding framework has been developed and used to interpret the information acquired from the interviews. The next section describes the rationale behind the coding framework.

The coding framework

The foundation of the coding framework has been given by the three key activities of urban development projects (framing, convening, and multivocality). The codes have been constructed to represent elements of each of the key activities, to be able to discover how the two organizations approach the same steps in project development. Besides the three key activities, there are other codes used as well, that are aimed to describe other phenomenon that has been mentioned by the theory chapter.

The first key activity is framing it explains how ideas and challenges are interpreted and how solutions are constructed to create collective action and mobilize people (Montgomery, et al. 2012, p. 382). The codes that identify activities that are related to the framing process of the urban challenges and the solutions that are aimed to solve them are "Aim of the organization", "Role of frames", "Design practice" and "Reframed challenge". Starting with the code "Aim of the organization", the information that it entails refers to the foundational idea of why the organization (in the case of a municipality this could be a department as well) carries out its daily activities. It ties in with the vision and the mission of an entity who is sets out to tackle a certain urban challenge. Understanding their key activities and the rationale behind them describes how the challenges faced by the organization are interpreted and why they chose those certain actions. An example that could be coded under this code is "the mission of the organization is to advocate for nature and bring green spaces back to the city" (Anonymus Interviewee 5). The code can be applied to information that describes the organizations' mission, vision or its overarching goals. Moving forward, the code "Role of frames" refers to examples that testify that the right framing process can bring across the desired outcomes of an urban development project. For example "Climate adaptation is not something that only engineers need to do, but it can be done together with citizens" (Anonymus Interviewee 9). It can be applied to information that shows that the organization's framing process created a shared understanding about the importance of a certain action, it resulted in partnerships across different stakeholders from the city and it also generated support from the local citizenry. The code "Design practice" covers the information that describes the act of creating the frames that achieve the desired outcomes. It is a code that provides information about the framing practices of an organization, but also about their ability to engage with different communities on their separate levels of understanding life, which is referred to as multivocality. This code is aimed at identifying the practices that organizations use to define why it is important to act in a certain field and what are the suitable steps that can be taken to achieve the desired outcomes. For example "One way to deal with long-term urban planning is through imagining different possible futures that allow for broadening people's minds" (Anonymus Interviewee 2). The code can be applied to information about creative and innovative design solutions that address urban challenges, in a way that it is appealing to diverse group of people. Finally, the code "Reframed challenge" shows what are the examples of ways of thinking of the representatives of the two organizations that allow for a change in the perception of people about a certain urban challenge. This code can be applied to the information from the interviews that describe how the changed perception about an urban challenge can open up new possibilities for action. For example, "The low rate of people who do sports is not just a question related to the physical health of people, but it is also connected to the financial health" (Anonymus Interviewee 6).

The second key activity is convening and it entails the activity when an organization through their understanding of an urban challenge is able to navigate complex boundaries, to open up the chance for collaboration and to tap resources, knowledge, and expertise (Montgomery, et al. 2012). In the case of an

urban development project, actively involving both stakeholders and the citizenry of the city is key for the activity of convening. The set of codes that can identify this action is "Agency to citizens", "Limiting creativity" and "Resource pooling". The code "Agency to citizens" refers to the activity of connecting different local communities to the goal of the urban development project with the help of socially and culturally appealing frameworks. These can be initiatives, actions or event when citizens are engaged and empowerd by ensuring that their needs and values are taken into account. An example can be the statement that follows: "people were really very happy with their newly installed green roofs because they look great and they were very proud of the impact that they made" (Anonymus Interviewee 5). This code can be applied to any action that actively engages citizens, especially when the action is tailored to be socially and culturally relevant. "Resource pooling" refers to the activity of an organization that helps them open up collaborations and tap into resources that are needed to navigate complex challenges. For example, "And of course, we need people helping [...] we had already a lot of refugees [...] and amongst them, you see later on, very skillful tailors. And they were not allowed to work, but voluntarily they could help us. And and this is how the project started". This code can be applied to any mention of collaborative efforts to gather resources and expertise from various sources. Furthermore, the code "Limiting creativity" has been identified to pinpoint practices that have been referred to as 'smart techno-fixes' by the literature. It doesn't need to be technical only, these are interventions that can lead to one-dimensional, top-down practices that limit the creativity and capacity of the stakeholders to meet the conceptual needs of transition (Matos-Castaño 2024). Once again, this code is used to show the organization's ability to talk to a variety of stakeholders and communities. An example code to this is "most people working at the municipality are a bit older and [...] still have that mindset of like, you know, we know what to do" (Anonymus Interviewee 7). This code can be applied to any factors that inhibit creativity or innovation in addressing urban challenges.

The final two codes of the coding framework cannot be grouped under the three key activities, but they are important in the context of the research. The code "Role of Tech" has been created to discover what is the role of digital technologies in urban development projects, according to the interview subjects. It captures how technology is leveraged to enhance urban sustainability and quality of life. An example where this code can be applied is "we're testing with digital twins, for example, and using those to sort of look to better solutions for the congested electricity net" (Anonymous Interviewee 3). This code can be applied to any information that describes how digital technologies are used to foster transformation. Finally, the code "Secret ingredients" covers all the unexpected findings that have a role in the sustainable transformation of our cities, but they haven't been covered by the theoretical background of the thesis. The quote "We want to invest in what we call multi-benefit solutions. And so we have a kind of Olympic-sized rowing track at the border of the city. And that is, of course, good for sports and recreation. It's even good for biodiversity. But at the same time it is a 4,000,000 cubic meter water storage area" (Anonymous Interviewee 1) is a good example of a secret ingredient.

Both types of interviews were coded with the same set of codes to see what are the differences and similarities in the problem-solving methods of the two organizations.

The coding framework is summarized in the table below:

Table 6

The coding framework

Code			Code group	Explanation	Operationalization
Aim	of	the	Framing	The driving mechanism of th	The code can be applied to
organiz	ation			organization which give	information that describes
				meaning to their daily activities	the organizations' mission,

			vision or its overarching goals.
Role of frames	Framing	An example that justifies that the complex tool for thought that lies in the centre of the challenge interpretation and solution creation can bring across the desired outcomes in an urban development project.	The code can be applied to information that shows that the organization's framing process created a shared understanding about the importance of a certain action, it resulted in partnerships across different stakeholders from the city and it also generated support from the local citizenry.
Design practice	Framing, Multivocality	The act of creating a new perspective for the challenge at hand.	The code can be applied to information about creative and innovative design solutions that address urban challenges, in a way that it is appealing to diverse group of people.
Reframed challenge	Framing	This way of thinking allows for a change in the perception of people about a certain urban system.	The code can be applied to the information that describes how the changed perception of an urban challenge can open up new possibilities for action.
Agency to citizens	Convening	Finding socially and culturally appealing frames to connect different communities living together in cities to ensure that transition represents their needs	The code can be applied to any action that actively engages citizens, especially when the action is tailored to be socially and culturally relevant.
Limiting creativity	Convening, Multivocality	Practices that limit the creativity and capacity of the stakeholders to meet the conceptual needs of transition.	The code can be applied to any factors that inhibit creativity or innovation in addressing urban challenges.
Resource pooling	Convening	The act of an organization or an individual of navigating complex boundries to open up tha chance for collaboration and tap resources.	The code can be applied to any mention of collaborative efforts to gather resources and expertise from various sources.
Role of tech	-	The role of technology in creating creating urban sustainability and improving the quality of urban life.	The code can be applied to any information that describes how digital technologies are used to foster transformation.

Secret ingredients	-	Unexpected finding that have an	The code can be applied to
		important role in the	all the unexpected findings
		sustainability transitions of cities.	that have a role in the
			sustainable transformation
			of our cities, but they
			haven't been covered by
			the theoretical background
			of the thesis.

The next chapter of the thesis will present the results that originate from the data analysis, based on the theoretical framework, data collection and data analysis described above. The similarities and differences in approach between municipalities and social entrepreneurial organizations will be described first, which will be followed with the discussion section

Findings

By comparing the approach of municipalities and social entrepreneurial organizations, the thesis offers potential learning opportunities for local governments on how to design urban development projects that can contribute to the sustainability transitions of our cities. The comparison was made based on the three key activities of every urban development project, framing, convening, and multivocality. The outcomes of the comparison highlighted how the two organizations understand urban challenges, what practices they use to find partners and tap the necessary resources for urban transformation, and elements that can potentially allow municipalities to design interventions that can cater to a larger variety of urban dwellers.

Differences in approach between municipalities and social entrepreneurial organizations

The exploration of how municipalities frame the urban challenges they face started with asking their representatives to describe the mission of the local government in a specific area of intervention. Later, further questions helped reverse engineer their understanding of the urban challenge. In most cases when public officials started to describe their municipalities' approach to societal challenges, their action-oriented behaviour originated after an event requiring immediate assistance. After that specific urgency had been handled, the municipality also started to look into what they could do to prevent another occurrence, hence the framing started to gain more relevance. This phenomenon has been described by the Advisor on longterm urban planning of one of the municipalities who have been interviewed. The person said "There's this big tension between people who say, oh my bridge needs to be repaired! We have these quayside walls that are suffering. They need to be repaired! So a lot of the decisions that are being taken within the municipality are also coming from this bottom-up, basically censor-sensing of the organization" (Anonymous Interviewee 2). Contrary to this, the success of the social entrepreneurial activities of the organizations that have been interviewed is offered by the special way of looking at problems we face in cities. All the interview subjects who worked for a social cause underlined that they are not the only ones looking at the challenge in the city, but their solution can present an extra set of values, an innovative character that increases their effectiveness. This innovative character has been found through a deep search of what the problem entails and what elements belong to the problem arena (Anonymous Interviewee 6, Anonymous Interviewee 7).

Social entrepreneurial organizations create their framework for the challenges they tackle based on their mission. The so-called calling of the individual who is in the front of the organization results in a mission and vision that is understandable, inspiring, and offers a stable ground for further elaboration. This can be connected to the origin story of the social entrepreneurs. Independent of the goal, every interview participant who works for a social cause today has emerged from the pool of people who use the streets of the city daily, who are present at the interactions between the different communities living there (Anonymous Interviewee 6), who suffer from the heat effect that has been enhanced because of the declining green spaces (Anonymous Interviewee 5, Anonymous Interviewee 8) or who were there for a friend when they got the news that their relatives died because of hypothermia when they didn't even know that they ended up on the streets (Anonymous Interviewee 7). The driving force of all these people who work at the forefront of social entrepreneurial organizations is the desire to change the ill-defined system that results in the above-mentioned unfortunate situations. This is also coupled with the financial compensation behind their projects. Many of them did not get a direct paycheck after their invested hours. Still, they relied on donations and funds that other people or organizations offered them to express their admiration and gratefulness for their work. One interviewee whose aim is to make sports widely available for people who cannot afford it highlighted that the success of her endeavours lies in the fact that there is no money involved: "I have no money. I have no other things than my mission" (Anonymous Interviewee 6).

Anonymous Interviewee 2 also highlighted that public officials who are tasked to work on similar challenges from the perspective of the local governments are often people who are isolated or don't have a direct personal mission connected to the problem itself, they are just tasked to come up with solutions. They are tied to the viewpoints they acquired during their disciplinary education and by working in the field. They also tend to live among the more fortunate segments of the urban population, in a place where they have the luxury of not having to face the reality and the impact of the exploitative urban systems. He said "We have the desire to see few things from their view, but we're not in their shoes. Most of us are highly educated, have a good income. Like we go on a holiday a couple of times. So how can we know what it is like to be a single mom with five kids with no balcony and debts? Like we have this technocratic understanding of, that's a bad situation. You don't want to have that. But it doesn't mean that we can actually understand what it is" (Anonymous Interviewee 2).

The interviews showed that in many cases the different departments of municipalities do not have an aligned mission and vision for the sustainable transition of their city. This was underlined by one of the public officials who said that it is hard to encompass the municipalities' interpretation of a particular challenge in a single sentence, because depending on which department you are asking they will approach the problem from a different perspective (Anonymous Interviewee 3). After this, the person also added that there is not one overarching goal for the municipality in this problem situation, only multiple sub-goals that might tie in with each other if the paths of two projects run by different departments cross each other. If two projects also happen to have conflicting agendas, then the challenge is further intensified by the disagreement of what approach is more desirable. As an example here, the conflict between the mobility and the urban greening department has been mentioned. While one of them sees great importance in creating more parking spaces in the city center to make the flow of people more efficient, the other department must give back more space to nature, to reduce the impact of the changing climate on the city.

The interviews with social entrepreneurial organizations showed that having a well-established frame for urban challenges makes it much easier for organizations to find partners in their endeavours. The reframed view of these organizations on the challenges they are aiming to solve with their activities has helped them in many cases to find like-minded people who have something to bring to the table and further develop the solution (Anonymous Interviewee 7). The way how the organization set out to help homeless people put together its task force is a great example of this. After the founder realized that he found an empowering way to help homeless people survive the cold nights on the street, he was confronted with the reality of having to find a way to scale up the production process of the product which helps them. Once he understood the challenge, he knew that his need for space, materials, facilities, and labour force needed to be reframed into a win-win situation for every stakeholder who gets involved. Therefore, he started looking for people who were trying to get rid of the fabric he needed, for companies who didn't know what to do with their old machines after they updated their production facilities, and for people who did not have a chance to get involved in the labor market. This latter example was the most creative one because he found out that the large amount of refugees who just arrived in the Netherlands at that time, were not able to find a job for themselves because of legal restrictions, but nothing stopped them from carrying out voluntary work that helps other people in need. Many of the refugees arrived from parts of the world where a man-made crisis (the war) made their lives much more challenging. Getting them on board as volunteers was possible because the products that can help homeless people survive the night can be used effectively in crisis zones as well, to offer people shelter.

Contrary to the example of this social entrepreneurial organization, the interviews with municipalities revealed that public officials often feel constrained when designing their solutions by the availability of financial means. All the interviews that have been conducted with public officials from Dutch municipalities talked about the availability of funding in at least one instance of the interview when questions were asked about how to approach transformation and what is needed for it (Anonymous Interviewee 1, Anonymous Interviewee 2, Anonymous Interviewee 3). The perception of what types of resources are needed for transformation is different between the two organizations. While social

entrepreneurs are focusing their efforts on widening the group of people who are part of their "revolution", municipalities often remain in the discussion about conventional types of resources such as money or political interest. With the help of convening, the interviewed social entrepreneurs were able to acquire subsidies from the municipality, that citizens can apply for to start their urban greening projects (Anonymous Interviewee 8). They managed to build themselves a strategic importance in the eye of the municipality because they could use their example and personal branding as a success story in their city (Anonymous Interviewee 6). It also positioned them as a connection between the different members of the local community to start creating change in how urban communities live their everyday lives (Anonymous Interviewee 5). As the importance of the personal mission in the context of change-making has been described already, their success ties in with the slogan of one of these social entrepreneurial organizations: "Noblesse oblige" (Anonymous Interviewee 6). This old French saying that is embedded in the Dutch culture also entails that a prominent social position comes with special obligations, a conviction that has been accepted by the social entrepreneurs and serves as the cornerstone for their dedication to urban development and creating a better city life.

The thesis identified three sets of differences in the approach of municipalities and social entrepreneurial organizations toward tackling urban challenges. The first difference has been found in the way how the two organizations create their understanding of the challenges they face. While municipalities tend to be more responsive to occurrences that show that something needs to be done differently in the city, the starting point for social entrepreneurial organizations is the fact that a change is needed in how we live our everyday lives, so we can stop the problems from occuring. This makes their solutions to urban challenges more innovative and outstanding in that respect because they were not led by an emergency mindset when designing them. Here, the difference in context between the two organizations plays an important role, because while social entrepreneurial organizations are solving one particular problem, based on personal interest, municipalities are responsible for a wide set of issues concerning the urban area. The wider focus area of their activities makes it harder to avoid emergency-led behaviour, however, the learning opportunity is valid. The second difference in how the two organizations tackle urban challenges was defined by the personal mission of the individuals who work in them. The interviews highlighted that public officials are often personally disconnected from the urban challenges they are tasked to tackle because they don't live among the segments of the population they are designing for. Social entrepreneurs on the other hand are people who emerged from the group of people who have been suffering due to an urban problem, hence they have a personal stake as well in solving the challenges. The third difference has been found in the way how the two organizations approach the resource acquisition for the projects they are working on. Social entrepreneurs rely on their mission and vision to get like-minded people to help them, instead of waiting for the availability of the right funding schemes or subsidies for the projects, as public officials do.

Elements that contribute to the effectiveness of urban development projects in fostering sustainability transitions

An element that is visible in the work of social entrepreneurial organizations, but it was also highlighted by one of the public officials (Anonymous Interviewee 2), is the act of imagining futures that we want to be part of. The stories of the social entrepreneurial organizations were all based on an existing urban challenge, with a deeper understanding of the different elements of a problem, but the solutions that they developed and keep improving originate from a desirable future scenario that contains elements that are the opposite to the current situation. One of the social entrepreneurs who was interviewed (Anonymous Interviewee 8) highlighted that the founding idea of her activities was the statistical data that she heard a few decades ago, stating that to keep people mentally healthy in an urban environment, there need to be at least 65 m2 green spaces available per household. She soon found out that her city only had 45 m2 to offer, which served as one of the initiating factors of her activities. The current solution to give the agency back to the residents so they can start greening their city through collective action was also reverse-engineered from a desirable future image when everyone has a role in the transition and people contribute according to their resources. This solution grew into a reoccurring activity when each year, the residents of the city spend their days

outside, in front of their houses or the proximity of their living spaces, working together on projects that are aimed at making their surroundings greener and more enjoyable. Although one of the public officials highlighted that he is also relying on the approach of designing future imaginaries (Anonymous Interviewee 2), he also mentioned that it is a challenge for him to bring this way of thinking to the other departments of his organization.

The interviews showed that with the help of social entrepreneurs, or the 'local heroes' who are involved in different segments of urban development, municipalities have the chance to connect with the citizenry on a more fundamental level. Having a representative who is part of both words is an important element in creating collaboration between the municipality and the citizens because interviews showed that the traditional forms of participation that the municipalities initiate, do not result in the desired outcomes. Municipalities face challenges in attracting a diversity of people to the public participation events because the citizens who tend to show up regularly, represent only one small segment of the local community (Anonymous Interviewee 2, Anonymous Interviewee 3). Besides that, they hardly receive any input that goes beyond the personal needs of these citizens, such as maintenance in specific neighbourhoods. According to the interviews, some municipalities already started exploring this idea, by inviting local heroes to moderate a public participation event: "So he could make fun of us (of the public officials), which kind of gave trust to the audience" (Anonymous Interviewee 2). The municipality's aim in that case was to be able to find a common language between the local government and the citizens, with the help of a person who is part of both worlds. The interviewee claimed that the pilot was successful and the event ended with a much looser atmosphere and deeper connections between citizens and their municipality. According to the interviews, there are multiple underlying factors to the increased benefits of having 'local heroes' involved in different urban development projects coordinated by the municipality. One of them helps strengthen the connection between citizens and the municipality, to change the perception of people that public officials working at the local government are unattainable. Multiple representatives from the social entrepreneurial organizations highlighted that the citizens feel empowered by their activities, because they feel that their views and needs are taken into account, contrary to many initiatives implemented by the municipality. This is also coupled with the fact that the intervention of social entrepreneurial organizations is represented by a person, an agent of change that makes the connection feel more human. For the general public, it feels more natural to look up a local mom who took the mission to help underserved communities start doing sports (Anonymous Interviewee 6) or reach out to a person who offers homeless people a bit of hope when they are at one of the deepest points in their lives, not knowing if they will make it to the next day because of the harsh weather conditions.

However, the interviews showed that in many cases the feedback that has been received during these events never really gets further consideration. The organizational culture of the municipalities doesn't offer the mandate for the public officials to implement the suggestions of the citizens (Anonymous Interviewee 2) and the mindset of the public officials, together with the organizational culture of the municipality indicates a tendency of unwillingness to listen, because they know better (Anonymous Interviewee 3).

The story of how one of the social entrepreneurs tackled this challenge can serve as a learning opportunity to overcome this. As has been mentioned already, the mission of her activities is to bring sports closer to the larger segments of the local population, because she realized through personal experiences, that only 30% of the people living in her city do sports (Anonymous Interviewee 6). As one might think, doing sports is mostly related to the physical and mental health of the people, but the organizations went deeper in the process of understanding this challenge and they soon realized that the influencing factors include the social and financial health as well, besides physical and mental health. Given that she lived close to these people, but she was not directly a member of this population, she managed to gain an expanded perspective on what the challenge is by truly listening to the needs of the people. She said, "I started on the streets because sport is only done in elite clubs, but what I needed was to understand the interactions that people (who could not afford that) had on the streets" (Anonymous Interviewee 6). With this, she positioned herself in a so-called

"helicopter view". She states that it was this third-person perspective that allowed her to understand the people who she is delivering for with her activities.

Furthermore, almost all the interviews conducted with the representatives of municipalities mentioned that they would like to give the chance for bottom-up initiatives or even social entrepreneurial organizations to form (Anonymous Interviewee 2, Anonymous Interviewee 3, Anonymous Interviewee 4). The approach of municipalities to create the necessary conditions for these initiatives to emerge is through pilots that they run in different areas of the city. However, the following quote describes that often these pilots end without any tangible outcomes: "So there's a lot of pilots. Experiments that we start in the municipality [...]. But then the pilot is done. And then we say great. And then we move on." (Anonymous Interviewee 2). This explanation represents the struggles that municipalities have in changing their well-established practices that are part of the culture of how the organization operates. The same social entrepreneurial organization that served as an example in the previous paragraph has also talked about this issue with local governments running pilots without specific outcomes, and she described how she ensured that her initiatives did not end after the first trial. The elements of her success lay in empowering people who can reach the desired outcome in their neighborhood or community. While in the case of local governments, the hierarchy of the organization often requires managers and project leads to run pilots, these people are rarely equipped with the knowledge and tools to create change on the level of the local community. "Make the boys responsible for their corner and offer them something in return. Next morning the corner is clean" (Anonymous Interviewee 6).

A final element that can serve as a learning opportunity for municipalities when solving urban challenges, has been highlighted by two social entrepreneurial organizations and one municipality. The so-called multibenefit solutions are effective elements of the sustainable transition of cities. These are approaches that can bring across benefits on multiple levels of urban life. As Anonymous Interviewee 1 mentioned "We want to invest in what we call multi benefit solutions. And so we have a kind of Olympic sized rowing track at the border of the city. And that is, of course good for sports and recreation. It's even good for biodiversity. But at the same time it is a 4,000,000 cubic meter water storage area" (Anonymous Interviewee 1). This approach has been represented by the organization that runs campaigns in neighborhoods to bring back nature to cities by installing green roofs: "People were very happy with their roofs because they look great and they were very proud of the impact that they made, but also really happy with the social interaction because, some people spoke more to their neighbors, during those weeks of the campaign, then in the years before that" (Anonymous Interviewee 5). Another great example of designing projects that bring across multiple benefits was done by the initiative that wants to help homeless people: "We call ourselves a triple impact NGO. We're helping homeless people, but we also give people with a distance from the labor force, a chance to have a job and a secure job with a normal, good salary according to their skills. And, of course, the whole product, I didn't tell yet, but it's upcycled, so it's made from textile waste" (Anonymous Interviewee 7).

There are five specific elements identified that social entrepreneurial organizations employ to make their initiatives more effective in fostering the sustainable transition of cities. The first element is the exercise of imagining desirable future scenarios for the city and constructing action-oriented steps to achieve them. This exercise ensures that the outcome of the different interventions results in a future that is aligned with the values of the city. Furthermore, finding people, 'local heroes' who have insight into different segments of society is an element that has been mentioned by multiple interview subjects. This proved to help the work of both social entrepreneurial organizations and municipalities because these individuals can bring people from different backgrounds closer to each other, by acting as a bridge between them. Positioning people to be the face of a specific solution to an urban challenge was the third element that social entrepreneurs do differently. Translating this into the context of the municipality can strengthen the connection between local governments and the citizens who receive the help. The fourth element was found in the work of one particular social entrepreneurial organization and it was about ensuring that the tasks are delegated to the person or group of people who are the most likely to get them done. By this, one can avoid

that the solution is infringed by the hierarchical structure of an organization, however, this element needs alteration to be able to implement it in the context of the municipality. Finally, the fifth element that makes urban development projects more effective in fostering sustainability transitions in cities is the designing of multi-benefit solutions. By implementing projects that have positive effects on multiple segments of urban life at the same time, the transition can be achieved faster.

Based on the above-presented information, the answer to the research question can be formulated.

The outcomes of the data analysis showed that local governments have two ways of learning from social entrepreneurial organizations to foster the sustainable transformation of cities. The first is by understanding the differences presented by the thesis and improving their workflow where possible. The first difference identified was the way how the two organization interpret urban challenges and construct the frames that can lead their interventions. While municipalities respond to the emergencies that occur in the city, social entrepreneurs approach challenges to change the perception of how we use the urban systems, so emergencies can be eliminated. The second difference between the two organizations highlights the personal agency of the members who work for them. While social entrepreneurs and their teams showed to be personally invested in the mission they pursue with their activities, public officials often handle urban challenges as another task that need to be solved during working hours. This contributed significantly to the success of their interventions. Thirdly, they differed on the level of acquiring the necessary resources for the urban development projects. While municipalities tend to rely more on conventional resources, social entrepreneurial organizations prove to be more creative and rely on the partnerships they make through their strong mission statement.

The second way of achieving the learning potential is through the implementation of the elements used by social entrepreneurial organizations that contribute to the effectiveness of urban development projects in fostering sustainability transitions. There have been five elements identified, namely, constructing future imaginaries that can lead the planning process of the interventions; connecting local heroes to the work of municipalities, so they can diversify the groups of people they can reach with their interventions; positioning people in the forefront of each urban development project, to strengthen the connection between citizens and the municipality; delegate tasks to people who are the most likely to get them done, to avoid the inefficiencies of a hierarchical system and designing multi-benefit solutions that can cater for a larger variety of people and find solutions to different problems at the same time.

Discussion

The thesis contributes to the field of Public Administration by exploring the learning opportunities municipalities can have from social entrepreneurial organizations in the context of the urban sustainability transitions. It has been recognized that the majority of the smart city interventions that were designed to make our urban systems more sustainable can be often regarded as cosmetic adjustments (Brömmelstroet, et al. 2022) or smart techno-fixes (Matos-Castaño 2024) that delay the real transition from happening and hinder the city stakeholders from using their creative capacities to design suitable solutions. The learning opportunities have been discovered through the comparison of the approach of the two organizations on the level of three key activities of urban development projects, framing, convening, and multivocality.

The way how projects and interventions are designed, initiated, and run by social entrepreneurial organizations can serve as a learning opportunity in multiple use cases for municipalities. As the literature presented, local governments tend to invest the majority of their resources in solving the problems that are the most urgent on the agenda. The results of the research show1 that the sense of ownership that a municipality shows towards the need to think about and find solutions for an urban challenge originates from the rise of an unwanted situation instead of having a well-established way of working with a clear vision of where the city wants to be in the future. Besides, it has been also shown that the lack of a central narrative from the municipality makes it much harder for initiatives to align with each other because there is no common agreement about what the challenge is, and what is the vision that needs to be achieved. All these elements make it hard to create a mission that everyone can contribute to. If there is no common way of understanding a challenge, depending on the urgency of the problem, there will be multiple groups of individuals or organizations who will create their own closed circle that comes with a specific challenge interpretation and produces isolated solutions that are not always compatible with each other. This can be connected with the literature that has been presented on the nature of contemporary urban problems (Dorst 2015). As Kees Dorst described it, a dynamic problem is prone to changes, anytime a new element is added to the problem arena (Dorst 2015). If such a change occurs, the chance that an undesirable outcome will manifest is higher. As we can see in the example when the two departments of the municipality have conflicting ideas on how the streets should be redesigned (Anonymous Interviewee 3), instead of uniting their resources and designing solutions that can serve a larger part of the urban society, the lack of coordination creates further segregation, with communities being better served than others.

Furthermore, even if the phenomenon is rarely considered in Public Administration, a field that is heavily defined by protocols and conventions, the personal agency of changemakers proves to have a significant effect on the success rate of initiatives. As the research showed, social entrepreneurs emerge from the pool of people who experience the impacts of ill-defined urban systems in their everyday lives, and this gives them a unique position in the problem-solving arena, because they know the target group they are designing for very well. Although the public officials who work for the local governments are often also citizens of the city, they tend to be further away from the disadvantaged communities who they are designing for, and this can result in undesired outcomes. The learning potential lies in finding a way to translate this element to fit the context of local governments. Although the thesis failed to identify how context-dependent elements can be translated, restructuring the human resources of the municipality, or diversifying the types of people who are hired by the organization can be a potential way of doing it.

According to Montgomery et al. (Montgomery, et al. 2012), getting multiple actors on board your challenge allows for tapping resources that would not be available for municipalities otherwise. The thesis showed that local governments often base their activities on traditional resources like money and political support, but social entrepreneurial organizations manage to find facilities, labor force, and materials without these, by relying on their strong mission statement. This is combined with the finding that it doesn't matter if one talks about urban poverty, homelessness, or the declining green spaces per capita in cities, one element that social entrepreneurial organizations used in their framing process was putting people and their needs first. The different background of public officials seemingly hinders them from having the perspective of the

people in need, which makes it also much harder to relate and design interventions. Based on this and the above-described finding, a connection could be drawn between municipalities and social entrepreneurial organizations. As Jessica Clement (2022) also highlighted, socio-technical challenges can be overcome by solving them from a cross-sectoral perspective (Jessica Clement 2022). The so-called 'local heroes' could join urban development projects to help find a focus for their activities that would help a higher number of people, co-shape the understanding of the challenges, bring connections to the table that the municipality couldn't tap into otherwise, and help the local government design interventions that talk to the different communities living in the city.

The success rate of the solutions designed and coordinated by social entrepreneurial organizations can be explained by the theoretical background of the thesis. As it has been mentioned by Matos-Castaño (2024) and Brömmelstroet (2022), the sustainability transitions require the creative imaginative capacity of the actors involved to be able to design for future scenarios with a reframed view on the role of the different urban systems that we have in place in our cities. This has been described in many of the projects social entrepreneurs do because they managed to find solutions to wicked problems like homelessness (Anonymous Interviewee 7) or lack of urban green spaces (Anonymous Interviewee 5) by understanding what these challenges mean and looking for connections that could bridge the gaps.

Conclusion

The thesis aimed to find learning opportunities for municipalities from social entrepreneurial organizations in the context of urban sustainability transitions. This has been initiated by the growing evidence that the widely used framework of smart cities often fails to bring across the promised changes that are needed in our contemporary cities. The exploration entailed a comparison between the approaches of the two organizations, based on a framework that was established by the already existing literature in the field of urban development.

After reviewing the literature on what are the underlying elements of the sustainability transitions, the three key activities that has been identified as the distinctive approach of social entrepreneurial organizations has been connected to urban development projects. This is how framing, convening, and multivocality have been positioned as the framework for the comparison. The data collection happened through semi-structured interviews with public officials from Dutch municipalities and representatives from social entrepreneurial organizations. For the data analysis, a coding framework has been established based on the important elements of the sustainability transitions presented by the literature.

According to the findings of the research, local governments have two ways of learning from social entrepreneurial organizations to foster the sustainability transitions of cities. The first way of learning is by looking at the differences in how the two organizations tackle urban challenges and improving their processes based on that. The second way is through the implementation of the elements used by social entrepreneurial organizations to make their interventions more effective in fostering sustainability transitions. The three key differences and the five elements require some alteration to fit the context of the municipalities, however, the research found no significant results on how this could be done.

Although the thesis aimed to discover how the context-dependent elements of the work of social entrepreneurial organizations can be translated to fit the domain of local governance, this goal hasn't been achieved. The limitation can be regarded to the research design. Ultimately, the third sub-question required an additional layer for the interviews and the analysis, which I was not able to fulfill within the time frame of the master thesis. Since my professional background is in Public Administration, the research design has been more efficient in finding learning opportunities than in investigating how the context-dependent elements used by social entrepreneurial organizations can be converted to municipalities. Another limitation of the thesis is that it only focuses on one direction of mutual learning, namely what local governments can learn from social entrepreneurial organizations when designing their situated urban development projects.

References

2016 NL Smart City Strategie. Dutch Government.

Barquet, Karina, et al.

2022 Exploring mechanisms for systemic thinking in decision-making through three country applications of SDG Synergies. Sustainability Science 17(4):1557-1572.

Brömmelstroet, Marco Te, et al.

2022 Identifying, nurturing and empowering alternative mobility narratives. Journal of Urban Mobility 2:100031.

Dorst, Kees

2015 Frame Innovation: The MIT Press.

Feng, Yifan, and Zekun Wang

Navigating the future of urban environments: A comprehensive analysis of contemporary urban planning. Applied and Computational Engineering 65(1):320-325.

Ferraris, Alberto, Gabriele Santoro, and Anna Claudia Pellicelli

2020 "Openness" of public governments in smart cities: removing the barriers for innovation and entrepreneurship. International Entrepreneurship and Management Journal 16(4):1259-1280.

Fietz, Bernhard, and Edeltraud Günther

2021 Changing Organizational Culture to Establish Sustainability. Controlling & Samp; Management Review 65(3):32-40.

Gallo, Mariano, and Mario Marinelli

2020 Sustainable Mobility: A Review of Possible Actions and Policies. Sustainability 12(18):7499.

Geenen, Anouk Jacoba Petronella

2023 Constructive Controversies: Designing for democratic debate and ethical deliberation in the smart city PhD Dissertation, University of Twente.

Geenen, Anouk, Julieta Matos Castaño, and Mascha Van Der Voort

The Potential of Smart City Controversies to Foster Civic Engagement, Ethical Reflection and Alternative Imaginaries. Pp. 143-155: Springer International Publishing.

Group, World Bank

2023 Urban Development.

Henderson, Rebecca

2021 Reimagining Capitalism in a World on Fire: Penguin Business.

Holierhoek Sophie Elisa, Price Rebecca Anne

2019 The Role of Design in Policy Making: A Wicked Problems Perspective. Design Innovation Management Conference, London, United Kingdom, 2019. Delft University of Technology.

Huppatz, D. J.

2015 Revisiting Herbert Simon's "Science of Design" Design Issues 31(2):29-40.

Jessica Clement, Miguel Manjon, Nathalie Crutzen

2022 Factors for collaboration amongst smart city stakeholders: A local government perspective. Elsevier 39(4).

Keivani, Ramin

2009 A review of the main challenges to urban sustainability. International Journal of Urban Sustainable Development 1(1-2):5-16.

Köhler, Jonathan, et al.

2019 An agenda for sustainability transitions research: State of the art and future directions. Environmental Innovation and Societal Transitions 31:1-32.

Londoño, Enrique Peñalosa

2024 Equality and the city: University of Pennsilvania Press.

Lukács, Henrietta- Zsuzsánna

- 2023 The social aspects of the local smart transformation in Romania and the introduction of the smart city concept in the city of ClujNapoca Essay, Public Administration, University of Twente. Matos-Castaño, Julieta
- 2024 Unleashing collective imagination through controversies: lessons from a smart city project. Montgomery, A. Wren, Peter A. Dacin, and M. Tina Dacin
 - 2012 Collective Social Entrepreneurship: Collaboratively Shaping Social Good. Journal of Business Ethics 111(3):375-388.

OECD

- 2019 Enhancing the contribution of digitalization to the smart cities of the future. OECD. Pinar Sefkatli, Frans Vlietman, Simone de Jonge
- 2017 WASTED, Vol. 2024. openresearch.amsterdam. Pless, Nicola M.
 - 2012 Social Entrepreneurship in Theory and Practice—An Introduction. Journal of Business Ethics 111(3):317-320.

Simon, Herbert A.

1996 The Science of the Artificial London, England: MIT Press.