

Cultivating transformative change and sustainability in Nijmegen



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A study of community gardens' collective identities and their connection to societal transformation towards sustainability in four of Nijmegen's community gardens

**Bachelor thesis Geography, Planning and Environment (GPE)
Nijmegen School of Management
Radboud University Nijmegen
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Author: **Lea Graef**

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Executive Summary

Due to the persistent threats of global environmental change, an increasing part of the research community pressures for transformative change of our societies that “mak[es] sustainability the norm rather than the altruistic exception” (Díaz et al., 2019, p.7). Such transformation should fundamentally change our ways of living and consuming. While it is not clear how and by whom such transformation should be initiated (Scoones et al., 2020), a number of scholars see potential in community action to stimulate societal change as state interventions are perceived as not radical enough for addressing the underlying issues. The concepts ‘social innovation’ or ‘grassroot innovations’ play a role here that comprise the organisation of civil society actors out of dissatisfaction and unmet social needs and them coming up with valuable sustainable solutions adapted to the local situations (Mehmood & Parra, 2013; Seyfang & Smith, 2007). As these grassroot initiatives are embedded in social networks, they reach and activate other citizens more effectively (Jaeger-Erben et al., 2015). Thereby, they are believed to be “role models for societal change” (Grabs et al., 2016, p.108).

Since a few decades, community gardens emerge again all over the Global North (Van der Jagt et al. 2017). This trend is observable for the Netherlands as well. Earlier studies have spoken of the positive effects that community gardens can have for their local communities. Despite some contested notions that connect community gardens to neoliberal influence, social inequalities and displacement (Crossan et al., 2016; Certomà & Tornaghi, 2015), these initiatives are thought to enhance sustainability in all domains and to present ideologically alternative narratives to unsustainable practices (Walter, 2013). To assess whether this is accurate and the potential of community gardens for societal transformation towards sustainability, an engagement with community gardeners’ identities is perceived as crucial as transformations need changes in identities for the implementation and sustainment of institutional changes (Todd, 2005). A common identity and sense of belonging structures actions and meaning of a group (Wittmayer et al., 2019) and thereby poses an interesting research focus to evaluate community gardens’ potential for societal transformation towards sustainability. For this purpose, new social movement theorist Alberto Melucci’s concept of collective identities was chosen to engage with the gardeners’ identities and their outlook on sustainability. It entails the analysis of the processes by which actors define the meaning of their action and the field of opportunities and constraints for such action (Melucci, 1996). The main research question is then; *How are collective identities and gardening practices connected to societal transformation towards sustainability in four of Nijmegen’s community gardens?*

By answering this question, this thesis is aimed to make a locally based contribution to the discussion on how western societies can become more sustainable and societal transformation can best be brought about. Through an investigation of how the collective identities of community gardeners in Nijmegen look like, how they relate to dominant sustainability discourses, how they are defined by power relations and finally how they might connect to societal transformation towards sustainability, knowledge is gained to what extent community gardens are transformative spaces that can influence societal structures in the direction of sustainability and also what potential obstacles and barriers these initiatives might confront. This information can be especially valuable for local policy makers to be informed on how to best approach, facilitate and support community gardens. In this qualitative ethnographic study, data has been collected by observing community gardeners during their work, holding semi-structured in-depth interviews with eleven community gardeners of four gardens in Nijmegen and a desk study.

The results of this study show that the community gardeners define the meaning of their actions with the personal enjoyment of the gardening practices and the feeling of doing something valuable for and with others. While all of the respondents have an affinity with gardening, they also enjoy the connections they build to other gardeners and the neighbourhood. By achieving a sense of community and self-efficacy, meaning is created. Whereas collective identities are thought to emerge

oppositional to dominant culture practices and present alternative ways of practising by applying non-instrumental rationality (Flesher Fominaya, 2010; Melucci, 1995), they are not independent of influences. In this research, the relation between the collective identities of community gardeners and dominant discourses about sustainability is examined. All of the respondents presented environmental concerned and conscious attitudes and try to adopt pro-environmental behaviour. However, the significance and extent varied within the groups. The belief was expressed that social connections are inherently important for achieving sustainability. Further thoughts were conveyed that showed the breaking down of global problems to local solutions and a belief in self-efficacy and human agency. However, the collective identities appear not to be fundamentally different to dominant conceptions. Sustainable behaviour was occasionally perceived as not compatible with leading a comfortable life and well-being and associated with sacrifices. As collective identities are not independent from influence and power relations, taking a critical look at the participation and action in community gardens is important as well. While earlier research already pointed out that for developing a community garden knowledge and material resources are needed to gain access and make institutional connections (Ghose & Pettygrove, 2014), the results of this thesis confirm that the requirements that are set by the municipality Nijmegen for starting a community garden cannot be met by every citizen. Also, within the gardens, interpersonal differences in availability of time and knowledge have shown to lead to forms of authority, hierarchy and exclusion. Therefore, power relations have some influence in defining the collective identities of the community gardeners. Yet, the results have also indicated some transformative capacity. The respondents reported to receive positive feedback and interest from the neighbourhoods. While the gardens can serve as spaces by which people can experience, connect and observe, the gardeners regularly deliver explanations and information and thereby have an educational function in informal settings. By sharing harvest, organising parties and openly explaining what is growing, knowledge can be shared and might inspire and create awareness about food supply, biodiversity and consumption among citizens. Furthermore, as the community gardeners try to involve people and let them experience, new social connections develop that enhance the social cohesion in the neighbourhoods and potentially reduce social alienation and unwanted behaviour such as littering.

To sum up, while on the one hand the collective identities of the community gardeners are to some extent defined by inequality, exclusion and hierarchy and their take on sustainability seems to be influenced by dominant culture perspectives, on the other hand they create opportunities for social-environmental connections and experiencing and learning about nature in an urban environment. It is concluded that the community gardeners' collective identities connect to societal transformation towards sustainability as people are enabled to act on their own behalf and new perspectives are created. However, the identities are also subject to larger societal inequality. Community gardens can thereby only be partly seen as transformative spaces as they indeed allow for experimentation with new ideas and practices, but do not reframe issues in a way that fully allows the co-creation and co-realisation of solutions. Based on this limiting factor, recommendations are made to reduce exclusion and strengthen collaboration between initiatives. Further scientific research should focus on other perspectives than the community gardeners' to gain a more complete picture of the gardens' transformative potentials.

This research is also limited by some issues. Due to the covid-19 outbreak in spring of 2020, the research could not be conducted as planned and the number of observations and interviews was restricted. By getting in touch with a smaller percentage of community gardeners than anticipated, it felt sometimes problematic to speak of 'collective' identities. As most respondents were around or above 50 years old, missing out on the young voices among the initiatives could have led to biased results and insights.

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1. Introduction

1.1 Project Framework

In the age of facing global warming and the ecological crisis, the need for building sustainable societies is undeniable. Díaz et al. (2019) speak of the need for transformative change that entails “a fundamental, system-wide reorganization across technological, economic, and social factors, making sustainability the norm rather than the altruistic exception” (p.7). In order to achieve that point of sustainability we cannot solely rely on technologic and innovative solutions that are driven by economic progress, we must equally give attention to changing our lifestyles and consumption patterns (Caprotti, 2015). Here the term societal transformation¹ comes into play referring to “a deep and sustained, nonlinear systemic change, generally involving cultural, political, technological, economic, social and/or environmental processes” (Linnér & Wibeck, 2020, p.222). The United Nations Conference on Environment and Development emphasised already in 1992 in Rio de Janeiro the crucial role of consumers for sustainable development (Jaeger-Erben et al., 2015). However, attempts at educating consumers and changing behaviour have proven themselves as not very effective so far. Measures to stimulate sustainable practices through policy tools as recommended in a report by the OECD in 2008 are also being critiqued by scholars like Leggett (2014) who argue them only leading to a more sustainable homo economicus. From a Foucauldian perspective, state interventions designed for behavioural change divert the attention from ideological alternatives to the neoliberal model and do not fundamentally change and address the problem of overconsumption that is inherent to capitalism. Another critique of such measures would be that they are just not liable for a big part of the world population which does not have “the privilege of being able to purchase an alternative ‘lifestyle’” (Dunford, 2017, p.390).

Jaeger-Erben et al. (2015) propose to instead observe how sustainable practices emerge by themselves in society. Today, a number of scholars, as well as the European Environmental Agency see potential in grassroot initiatives to stimulate social change (Matthies et al., 2019; Rossi, 2017). In this regard the concept of social innovation often gets mentioned that refers to individuals, groups and communities that organise themselves out of dissatisfaction with current practices and unmet social needs (Mehmood & Parra, 2013). Seyfang and Smith (2007) introduce the term ‘grassroot innovations’ that refers to “networks of activists and organisations generating novel bottom-up solutions for sustainable development; solutions that respond to the local situation and the interests and values of the communities involved.” (p.585). Grabs et al. (2016) further define it as any collaborative action by a local community that is characterised with flat hierarchies and participatory decision making. These initiatives do not necessarily have to be political in a way that they intend to influence state power. The sociologist Erik Olin Wright (2010) states that these new ways of social organisation, often unintentionally, undermine the dominant system and can bring about social change. Bashir et al. (2013) studied the resistance among individuals to support social change by examining negative stereotypes that people have of activists, the typical change agents. They often are perceived as hostile by publicly criticising mainstream cultural practices and thereby ironically create objection and refusal to adopt pro-change behaviour (Bashir et al., 2013). People only want to join groups and adopt their behaviour if they are perceived as pleasant and positive. With this in mind, it is especially interesting to look at community action and grassroot initiatives from the perspective of unconscious and unintentional change. A special role is thus accredited to civil society actors for they are believed to have the potential of coming up with and showcasing legitimate alternatives to current unsustainable practices (Frantzeskaki et al., 2016). Grabs et al. (2016, p.108) state that grassroots initiatives can become “role models for societal change”. This is supported by the expectation that social innovation driven by grassroots initiatives can more efficiently reach and activate citizens as they are embedded in social networks (Jaeger-Erben et al., 2015). To understand success factors for societal change

¹ In academic literature, the term ‘social transformation’ is often used for the same purpose as well. In this thesis however, the term ‘societal transformation’ was used to refer to wider societal structures and because the literature that functioned as a basis mostly referred to the latter term in context with sustainability.

towards strong sustainable consumption, Grabs et al. (2016) developed a multilevel analysis tool from an interdisciplinary perspective. Between the levels of individual, group and society the success factors are proven to be interdependent and connected through feedback mechanisms. Individual motivations form a collective, however the collective in turn shapes the individual and can provide alternative visions and narratives to the outside (Grabs et al., 2016). It can further establish and strengthen moral and value systems (Grabs et al., 2016).

Grassroot initiatives entail all sorts of community action like community energy projects or ecosystem management (Grabs et al., 2016). For this thesis, urban community gardens were studied as a particular form of grassroot initiative and social movement. Community gardens are a broad concept. In the following, therefore, the definition of Veen (2015) is used that specifies community gardens as “a plot of land in an urban area, cultivated either communally or individually by a group of people from the direct neighbourhood or the wider city, or in which urbanites are involved in other ways than gardening, and to which there is a collective element” (p.17). This communal aspect can for example be shared gardening work responsibilities (Veen, 2015). Historically, urban gardens have had a fluctuating popularity but are on the rise again in the Global North since a few decades (Van der Jagt et al., 2017). In the Netherlands this trend can also be observed. In many Dutch cities, community gardens have been initiated by “citizens, housing corporations, local governments, entrepreneurs, artists and community workers” (Veen, 2015, p.17). Lin et al. (2017) summarised the potential benefits of urban gardening: contributing to liveability, sustainability and resilience of a city by having positive impacts on health and nutrition, food security, social cohesion and biodiversity. It enables communities to produce collective memories of food-production and maintain local knowledge in times of globalisation (Lin et al., 2017). Whilst some speak of urban gardens as “counter-hegemonic spaces” (Eizenberg, 2012, p.765), it is also noted by other scholars that they can reproduce social inequalities through gentrification and displacement (Certomà & Tornaghi, 2015). But overall, their positive effects on community and sustainability are highlighted in research.

Community gardens appear thus as valuable study subjects for urban sustainability as well as for understanding and promoting transformation in that direction. Todd (2005) states that in social transformations, changes in collective identities are central because they enable the implementation and sustainment of institutional changes. Additionally, Mezirow (2000) (in Linnér & Wibeck, 2020) explains that any societal transformation comes with shifting identities and preferences. This is supported by the call for systemic shifts in mental models and paradigms for transformation (Pereira et al., 2018). Wittmayer et al. (2019) analysed how social innovation initiatives construct their own understandings of societal transformation through narratives of change. These are necessary for building a common identity and a sense of belonging which structure actions and meaning of a group through a common outlook on reality and desired futures (Wittmayer et al., 2019). Combining knowledge of earlier research on grassroot innovations and societal transformation towards sustainability, studying the identities of community gardeners is valuable for gaining insight on their transformative capacity in a local context. For this purpose, Alberto Melucci’s theory of collective identities is used as a theoretical framework to engage with community gardens as transformative spaces that can provide opportunities for social learning and establish social structures for civic engagement and well-being.

After this first chapter in which the research aim, the research questions and the relevance of this research are elaborated, the theoretical framework follows. In this second chapter, the theoretical concepts of this research namely societal transformation, sustainability, collective identities and community gardens are explained, put into context and their relations are visualised in a conceptual model to provide the reader with an understanding of how and why the concepts are being connected. In the following third chapter, the methodological choices for this research are being described, explained and reflected on. First, it will be explained why an ethnographic approach deemed as most suitable, followed by a description of the research process and a critical reflection of the used methods and limitations to this study. In chapter four, short descriptions of the four community gardens that participated in this research are given to provide the reader with enough background knowledge for chapter five, which contains the results of the analysis. After the results, chapter six follows with the

conclusion. Answers are given to the four subquestions and the main research question. In chapter seven, recommendations are made for further scientific research, to the local government and the community gardeners. Lastly, in chapter eight, this research and its process will be critically reflected on.

1.2 Research aim

The aim of this research is to make a locally based contribution to the discussion on how western societies can become more sustainable and transformation can best be brought about, building on earlier knowledge about bottom-up grassroots initiatives generating alternative solutions, ideologies and practices to current unsustainable behaviour. This is achieved by investigating how the collective identities of community gardeners in Nijmegen look like, how they relate to dominant sustainability discourses, how they are defined by power relations and finally how they might connect to societal transformation towards sustainability. I conduct qualitative research in four of Nijmegen's community gardens by interviewing and observing community gardeners during their work, gaining knowledge on to what extent community gardens are transformative spaces that can influence societal structures in the direction of sustainability and also what potential obstacles and barriers for these initiatives might be.

1.3 Research questions

How are collective identities and gardening practices connected to societal transformation towards sustainability in four of Nijmegen's community gardens?

1. How do community gardeners define the meaning of their actions and their relationships with other gardeners?
2. How do community gardeners' collective identities relate to the dominant discourses about sustainability?
3. To what extent are the gardeners' collective identities defined by the power relations within the community gardens?
4. In which ways do community gardeners' collective identities and practices relate to societal transformation?

1.4 Relevance

Societal relevance

As mentioned in the introduction, the need for building sustainable societies is undeniable. While there is not one right path for achieving societal transformation towards sustainability, a lot of hope is placed in grassroots initiatives to come up with novel bottom-up solutions that could be of great influence through upscaling. As community gardens are developing all over the world, they promise to enhance local sustainability in all domains. These initiatives are said to make the places they inhabit happier, healthier and more connected communities (Grabs et al., 2016). An engagement with the gardeners' identities might provide valuable insights on the participants' motivations and goals and how to stimulate more sustainable practices. By focusing on the analysis of collective identities, local needs and perspectives on sustainability can be portrayed and used for translating and placing transformation in a local context. Such focus makes this research especially useful for local policy makers to be informed on how to best approach, facilitate and support these gardens.

Scientific relevance

Considering the increasing interest from the research community in societal transformation towards sustainability, it is noteworthy to point out that not enough attention has been paid to the role of social movements in transformations (Temper et al., 2018). Whilst there have been connections made

between grassroots initiatives and social innovation for transformation and the role of identity in societal transformations has been highlighted, this study will directly link collective identities of grassroots initiatives to societal transformation. As a distinction can be made between three different kinds of identities with regard to community gardens, namely the identity of the garden, the identities of the participants and thirdly the collective identities, a focus on the third kind is deemed as the most insightful to understand societal transformation having in mind Grabs et al.'s (2016) multilevel analysis tool that views the collective as intermediate. Previous research on community gardens has portrayed them as counter-hegemonic spaces (Walter, 2013), linked them to social innovation (Ulug & Horlings, 2019), as well as spoken of their transformative potential (Eizenberg, 2004). Viewing community gardeners as change agents, it is relevant to examine their collective identities and practices in order to gain insight on their relation to and ideas of the broad concept of sustainability. This way, their value for societal transformation towards sustainability can be assessed. A discussion of the way their collective identities are negotiating with and evolving among the prevalent societal structures can provide further knowledge on what kind of role social movements can play in the transformation towards sustainability and how to best facilitate them. This can be especially useful in the local context. According to Holland (2004), community action develops according to the needs of a community and should thus be understood in a local context. In the understanding of community gardens as citizen-led projects, an engagement with their collective identities and practices is useful to recognise obstacles and hindrances they might encounter (Temper et al., 2018). Additionally, while in this study four different community gardens have been studied with different organisational designs, this can offer insights to the meaning design can have for collective identities and their transformative potentials.

2. Theoretical Framework

In this chapter, the theoretical background of this research is explained. Firstly, an explanation of the concepts of societal transformation and sustainability and the connection between them is given by reviewing what has been researched in that field. Next, the concept of collective identities is discussed and placed in its historical context. Thirdly, earlier research on community gardens as transformative spaces is reviewed. Finally, I elaborate on the conceptual model that underlies this thesis.

2.1 The concepts of societal transformation and sustainability

As mentioned in the introduction, ecological crises and environmental change as well as social inequality pressure for transformation that ensures sustainability. In the pursuit of social change, a distinction is made to begin with between transformations and transitions (Stirling, 2015). Transitions are considered to be “managed orderly under control, through incumbent structures according to tightly disciplined knowledges, often emphasizing technological innovation, towards some particular known (presumptively shared) end” (Stirling, 2015, p.54). In contrast, transformations are “involving more diverse, emergent and unruly political alignments, more about social innovations, challenging incumbent structures, subject to incommensurable knowledges and pursuing contending (even unknown) ends” (Stirling, 2015, p.54). Transformations are thus deemed as more effective for radical social change. It remains however often unclear what actually should be transformed, in what way and for and by whom (Scoones et al., 2020). Scoones et al. (2020) differentiate three approaches to societal transformations that come from different political traditions and understandings of social processes. Firstly, they distinct structural approaches that are based on notions of Marx, Lenin and Gramsci focussing on changes in the underlying foundations of a society and the call for an ideological overhaul (Scoones et al., 2020). The second category, systemic approaches, originates from systems thinking in the 1980s and centralises around targeting only particular features of the socio-ecological system that need change by using interventions. Transitions are highlighted in this approach (Scoones et al., 2020). Lastly, Scoones et al. (2020) identify enabling approaches that focus less on outcomes but on building the social capacities “that empower individuals and communities to take action on their own behalf” (p.67). Furthermore, they elaborate; “opportunities for transformation are seen in terms of individually smaller actions that collectively, over time, shift system states in ways which may be unexpected but which reflect the values and visions of mobilized agents” (p.67). Necessarily, all of these approaches work on different scales and complement each other. Also Linnér and Wibeck (2020) have made a threefold categorisation of interventions for transformation; technological innovations, transformative learning and formulating new narratives of sustainable societies. Whilst technological innovations are thought to be necessary, transformative learning and shifting narratives are essential for establishing new perspectives, values, knowledges and worldviews (Linnér & Wibeck, 2020). These interventions aim at empowering actors and are therefore similar to Scoones et al.’s (2020) enabling approaches. Pereira et al. (2018) place these theoretical notions in a spatial context and speak of transformative spaces which they define;

“as “safe-enough” collaborative environments where actors invested in transformation can experiment with new mental models, ideas, and practices that can help shift social-ecological systems onto alternative pathways. Transformative spaces allow and enable dialogue, reflection, and reflexive learning, while reframing issues in ways that allow solutions to be cocreated and corealized” (Pereira et al., 2018, para.5).

The research objects in this study, community gardens, could then potentially be defined as transformative spaces.

Reflecting on sustainability transformations in a global context, they appear to be defined and understood very differently across different societies (Linnér & Wibeck, 2020). Also the concept of

sustainability is manifold and interpreted differently by different interest groups (Barrow, 1995). It is therefore useful to pay some attention to the term. Traditionally, sustainability encompasses three equal dimensions: economic, social and ecological. The term is mostly used in regard to development and entails then “a certain compromise among environmental, economic, and social goals of community, allowing for wellbeing for the present and future generations” (Ciegis et al., 2009, p. 32). Some note that the dualism in sustainable development between sustainability and development is problematic (Ciegis et al., 2009). Especially in the form of sustainable growth as it is based upon the notion that endless growth is possible (Ciegis et al., 2009). Several scholars have criticised this capitalist use and interpretation of sustainability. The green growth/ economy discourse promises the decoupling of economic growth with resource consumption and environmental degradation while also leading to social justice (UNEP, 2011). Therefore, through an adjustment of current economic practices, environmental and social sustainability are thought to be achievable. It is argued however, that this discourse is deeply embedded in capitalism (Wanner, 2015). The green economy is based on false premises and does not question underlying power relations and actual causes for the system’s unsustainability as Wanner (2015) argues. Cock (2011) points out that green capitalism with its commodification of nature is just deepening social and environmental injustices. Counter-hegemonic and alternative approaches as Wanner (2015) mentions, see a decommodification of nature and of knowledge as key struggles.

This is where societal transformation is called for to break with the old narrative of perpetual economic growth. O’Brien (2018) identified three spheres of transformation, the personal, political and practical (see figure 1).

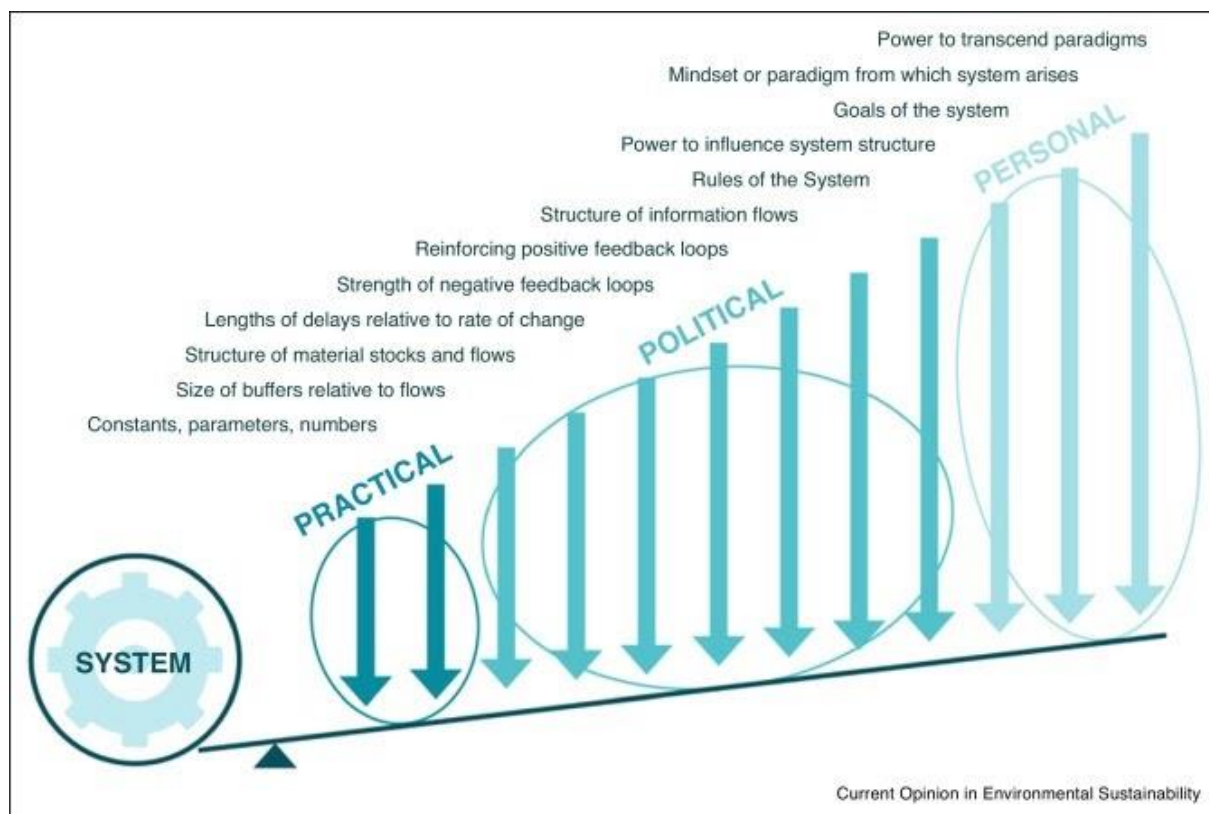


Figure 1: Leverage points for systems change based on Meadows [1999] and their relationship to the practical, political and personal spheres of transformation (O'Brien, 2018)

According to her, the personal and the political sphere carry the most weight in shifting the system. They do not stand alone but are interrelated and share reciprocal relationships. O’Brien (2018) draws on the sociologist Erik Olin Wright and concludes that for social change, collective agency is needed as well as the recognition of the interconnectivity and potential of human agency to influence and

catalyse systemic changes. To analyse these factors, collective identities have been chosen as the research entity in this study and will be explained in the next section.

2.2 Collective identities (the actor and his/her/their² environment)

Collective identity is a concept traditionally used in the studies of social movements to analyse identification with and cohesion within a group that finds its early formations in the works of Marx, Durkheim, Weber, Goffman, Blumer and Simmel (Flesher Fominaya, 2010). While there is not one consensual definition of the term, the most commonly used and influential theory of collective identities comes from Alberto Melucci in the studies of contemporary new social movements (Flesher Fominaya, 2010). New social movement theories emerged in the mid-1960 based on the insufficiency of the 'old' Marxist inspired social movement theory to explain the formation of a new sort of movements (Pichardo, 1997). These new social movements have moved away from the working-class movements of the industrial age and towards the pursuit of quality of life in postmaterialism (Pichardo, 1997). Alberto Melucci (1980) saw the emergence of new forms of social movements as collective claims of individuals to realise their own identity in an age where technocracy is increasingly penetrating everyday life.

According to Melucci the term refers to;

“an interactive process through which several individuals or groups define the meaning of their action and the field of opportunities and constraints for such an action. (...) The process by which a collective identity is constructed, maintained, and adapted always has two sides to it: on the one hand, the inner complexity of an actor, its plurality of orientations; on the other, the actor's relationship with the environment (other actors, opportunities/constraints)” (Melucci, 1996, p. 67).

Defined as a process, collective identities involve cognitive definitions of ends, means and the field of action that are enacted through rituals, practices and cultural artefacts and voiced through a common language (Flesher Fominaya, 2010). Bonds of solidarity are formed through shared leadership, organisation, ideologies and rituals (Flesher Fominaya, 2010). Here it is important to mention that cognitive definitions do not have to be the same for every group member and may even contradict each other (Flesher Fominaya, 2010). Ideologies, beliefs, motivations and goals can all differ a little and are therefore not per se necessary for generating collective action. Between cognitive definitions of ends, means and the field of action and networks of active relationships between actors, Melucci (1995) stresses the role of emotions to feel part of a common unity. For him, meaning and cognition always involve feelings and emotional investment and to describe this part as irrational in the common sense of 'bad' would be nonsensical. Whilst collective identity is understood as something oppositional to dominant culture practices (Flesher Fominaya, 2010), Melucci (1995) speaks of a paradox between a social movement's affirmation of their difference from the rest of society and their need of society to be recognised as a social actor. Therefore, “actor and system reciprocally constitute themselves” (Melucci, 1995, p. 47). Yet, the appliance of non-instrumental rationality is key to the new form of social movements and thereby deliver an alternative to traditional ways of practising. Not focussing on the conquest of political power and lacking an overall strategy, these movements are fixed on the satisfaction of their demands and gain their identity by refusing political instrumentality (Melucci, 1980).

In the field of new social movement theories, there is a debate about whether these new social movements are solely responsive to social structures or if these can make progressive change (Buechler, 1995). Also, about the movements' nature being either political meaning that they address state power relations and intend to change them or cultural motivated meaning that they have some representational or symbolic function (Buechler, 1995). Buechler (1995) describes this binary

² Here, 'their' refers to people that do not identify with the binary gender system.

distinction as rather problematic because of course all movements are in some basic way political as well as cultural and suppress their full nature. However, this distinction makes sense to the degree of conscious intentionality. Because Alberto Melucci believed that cultural movements can be especially useful as they demonstrate alternatives outside of the system's realm by applying non instrumental rationality (Buechler, 1995), motivations, beliefs and practices as well as their collective identities are valuable study subjects for understanding social change. Forms of collective identities are of course not existing independent of current structures and are also shaped by prevalent discourses (Ergas, 2010). Therefore, the reciprocity in the transformative capacity of collective action should be taken into consideration.

2.3 Community gardens as transformative spaces

As already mentioned in the introduction, community gardens are contested spaces. While they are pictured as spaces of food production, recreation and social interaction on the one hand, they are associated with spatial conflicts and clashing interest in urban development on the other (Ioannou et al., 2015). Some applaud community gardens as claims to the right to the city and challenging dominant power relations, whilst others perceive them in the context of neoliberalisation and reduced state responsibilities (Ghose & Pettygrove, 2014). Crossan et al. (2016) state that despite community gardens' practices are not free of neoliberal influence, they are not defined by this and offer other socio-political subjectivities as well. They function as spaces of empowerment and collective learning (Crossan et al., 2016). Walter (2013) even speaks of community gardens as "a pedagogical site to support the lifeworld against the colonizing efforts of the system; they enact an ideological alternative to dominant common sense notions of industrial food systems, private property and urban real estate 'development'" (p.531). Community gardening practices enable groups to form place-based collective identities and build connections between people that would otherwise not get into contact with each other (Ghose & Pettygrove, 2014; Crossan et al., 2016). Thereby, new urban spaces are created that offer the possibility for meeting and exchanging knowledges and ideas (Crossan et al., 2016). Certomà and Tornaghi (2015) connect community gardens to Etienne Wenger's concept of 'communities of practice'. The term refers to groups of people that share a specific passion or concern that they actively engage with and collectively learn about through interaction (Wenger, 1999).

While community gardens have an immediate transformative capacity in a spatial sense and at the neighbourhood's level, a study by Ulug and Horlings (2019) suggests that community gardens have even the potential to bring about social innovation by branching out, inspiring others and upscaling initiatives. Van der Jagt et al. (2017) also found evidence that people not involved in communal urban gardening receive benefits from these social practices such as access to local and healthy food and a transformation of local green spaces. Kingsley and Townsend (2006), however, saw that the positive effects do not necessarily extend beyond the people involved in communal gardening or at least that it takes a lot of time. They stress the factor of time needed to build and develop high levels of social capital. Often these community gardening initiatives meet obstacles and barriers and fail. Their success was defined by van der Jagt et al. (2017) in the degree to which civil society actors are involved in sustainable practices as well as in political activities. The authors suggest focussing on an approach that "enables local people to discover, nourish, adapt and co-create their own culture" (Van der Jagt et al., 2017, p. 273). Turner (2011) notes that a large part of research sees community gardens' success of promoting sustainable urban living in their communal aspect. In contrast, she believes it to be the individual engagement in embodied practices. By engaging in sustainable practices like gardening, participants are able to reconnect with the food system and the urban landscape. However, her study indicates also that sustainable practices within the garden do not necessarily translate into a broader commitment to sustainability in the individual's life. The question also remains of how individual behaviour can stimulate social learning and influence structures and attitudes on larger scales.

2.4 Conceptual model

From the theoretical framework, interrelations and connections between the different concepts can be drawn and are visualised in a simplified form in the conceptual model below (figure 2).

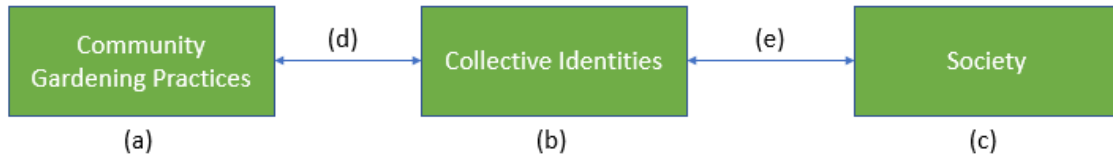


Figure 2: Conceptual Model

Collective identities (b) are formed and maintained by the pursuit of community gardening practices (a). The connection between practices and identities (d) is an interactive process because on the one hand, gardeners' engagements with the practices lead to the establishment and maintenance of collective identities. On the other hand, the collectivity of identities shapes the practices and the individuals that pursue the practices in turn. Because collective identities form and exist within prevalent societal structures (c), they are being shaped by these (e). However, the connection (e) is also reciprocal as identities hold the power to establish new mental models and narratives that might transform societal structures towards sustainability. Among the relationships (d) and (e) power relations can also play a role in shaping and defining collective identities.

3. Methodology

This chapter encompasses a description of the applied methodology to answer the research questions. The research design and the used methods will be explained. Additionally, a short reflection on limitations to this study is included.

3.1 Research strategy – Ethnography

The main question of this thesis is; “How are collective identities and gardening practices connected to societal transformation towards sustainability in four of Nijmegen’s community gardens?”

In order to answer this question, empirical data had to be acquired. Therefore, a qualitative approach deemed as most suitable because it enables to engage with the views and day-to-day lives of people in their natural environment (Vennix, 2016). For studying collective identities, I chose an ethnographic research design. Ethnographic research focuses on shared patterns of behaviour, beliefs, values and language of a culture-sharing group (Creswell & Poth, 2018). Thereby, patterns of social organization and ideational systems can be analysed. For studying the collective identities of community gardeners, this approach is highly suitable because it enables to engage with the shared understandings of practices of the gardeners as well as it is useful for analysing the binding forces between them. Thus, ethnography with its focus on shared patterns, is in this case very useful for gaining insight into the collective ideas, beliefs and goals of the community gardeners and thereby suitable for answering the research question. When conducting ethnography, the researcher begins with a theory to focus his or her attention and to explain what he or she hopes to find (Creswell & Poth, 2018). For this thesis on collective identities and their connection to societal transformation towards sustainability, the focus lays on collective identities, so a shared understanding of means and practices and group relations, as well as their thoughts and beliefs on sustainability and on the structuration of their practices within society, potentially inducing societal transformation.

Because in qualitative research phenomena are studied holistically, multiple sources of information are used and methods applied for triangulation purposes (Vennix, 2016). In an ethnographic study, participant observations and in-depth interviews allow the researcher to achieve an understanding of the day-to-day lives and perspectives of the members of a culture-sharing group (Creswell & Poth, 2018). A description of the used methods and the research process is following in the next section.

3.2 Methods

In this section, I elaborate on the methods used, the collection and analysis of data. The research followed an iterative process of literature study and fieldwork in four phases. The literature review enabled me to operationalise the key concepts and build the interview guide.

3.2.1 Desk study

Phase 1: relevant literature

As a first step, relevant literature was acquired and studied that entailed research on grassroots initiatives, social innovation, societal transformations, collective identities, sustainability and community gardens. These were essential to establish a guideline on what theory and data was needed for answering the research question.

Phase 2: getting into contact and preparing interviews

Next, I looked for community gardens within Nijmegen and gathered their contacts. I reached out to multiple community gardens all over the city, asking whether they would be interested in cooperating with interviews and observations. Out of seven gardens I contacted, four got back to me. Additionally, the interview guide was created, based on the information from phase 1.

3.2.2 Participant observation

Phase 3: gathering empirical data

Participant observations allow the researcher to take part in the social reality of the respondents, so the natural surroundings of the respondents form the site where data is collected (Vennix, 2016). Observations are useful because the researcher can observe how people behave rather than have them explain how they think they are behaving (Vennix, 2016). In participant observations, the researcher takes part in the activity at the site and can thereby gain insider views and subjective data (Creswell & Poth, 2018, p.167). In research methodological literature, it is often noted that the researcher might face the risk of going native while participating. This means that they become overly familiar and lose the needed scientific distance which might lead to missing out on valuable information for the research (Vennix, 2016). It can therefore be very important for the researcher to reflect on their own subjective point of view and the feelings they have at the site. Another trap so to speak, the researcher can fall into are the observer and/ or participant biases. With their presence at the site, the researcher runs the risk of influencing the field. They can also risk interpreting and perceiving only in ways that are confirming their already existing assumptions and views (Vennix, 2016). Melucci (1995) himself elaborated on this when emphasizing the importance of studying collective identities not as things but as processes. With any research approach that allows this, the researcher should reflect on their intrusion and possible interruption in this process as they might cause for example self-consciousness among the participants and thus influence the site with their presence.

For this thesis, participant observation was chosen as a method because participation allowed the collection of a bigger amount of information than just mere observation. Participating in gardening work enabled me to ask questions, engage with the practices in the natural setting of the respondents and observe how gardeners were interacting with each other. Originally, I had planned to do participant observations at every garden. However, due to the covid-19 outbreak, this was no longer possible as most of the gardens did not meet for collective gardening work anymore. From April to June 2020, I was able to visit the Vlindertuin four times and join them for their monthly gardening mornings as they continued with their activities. I started helping regularly in the garden and got to know the volunteers. By doing the same work as everyone, I could experience some of the meaning of working in the garden myself. Fortunately, all of the four permanent members in the Vlindertuin were interested and motivated in helping me with my research. During the standard coffee breaks, we talked and shared personal information. I was not perceived as an outsider but as part of the group and also joined their group WhatsApp chat. With this comfortable and trustful atmosphere as well as not to disrupt the work, it would not have been possible to take notes during the observations. For these reasons I wrote down my observations in reports immediately after finishing with the activities. I also visited one organisational meeting of the greenhouse gardeners in the Vlindertuin where I was able to gain more insight into the organisational structures and group dynamics.

3.2.3 In-depth interview

Phase 3: gathering empirical data

Next to participant observations, semi-structured in-depth interviews were used as a method for this research. In-depth interviews are useful for gaining insight into people's point of view, meaning and experience (Creswell & Poth, 2018) and were therefore deemed as valuable for this research. Not only can personal motivations and ideas be communicated, also body language can be observed, and probing questions can be asked for clarification with this method (Creswell & Poth, 2018). The interview guide was built from the concepts that arose during the desk study. The questions on the interview guide were formulated as open and objectively as possible to not steer the respondents into a direction and gather uninfluenced information. During the interviews, I asked for a description of the gardeners' practices to get an insight into the workings in the gardens, which I was not able to observe

due to covid-19 outbreak. Based on Melucci's definition of collective identities, I asked respondents about their sense of community, group relations, norms and values and a number of questions to get an insight into what gardening meant to them. Like Ergas (2010) who studied how collective identities and actions of eco villagers are negotiated within political opportunity structures, I asked respondents about their sustainable everyday practices, what sustainability meant to them and what they thought of society in general to get a picture of their worldviews and ideals. I also asked general questions on the history of the gardens and how they were organised. In line with Ulug & Horlings (2018), for evaluating the impact of community gardens, I asked whether changes had occurred in their own lives and communities potentially through the gardens. Additionally, I posed the question of what respondents thought is the influence of community gardens on the neighbourhood, city and even society. The complete interview guide can be found in appendix I.

For this research, nine interviews were conducted with eleven respondents, which lasted between 37 to 80 minutes. Two interviews were held with two respondents simultaneously, on their request. These were especially interesting to get a feeling of the interaction between the volunteers. The interviews were all held face-to-face and mostly took place in the gardens where I also received tours from the volunteers or at the homes of the respondents. Two interviews were held via video calls. All interviews were recorded except for one where the technology failed. For that interview, I took my notes and wrote a report. The rest of the interviews were all literally transcribed for analysis.

3.2.4 Analysis

Phase 4: data analysis

For analysing the data, all transcripts, observational reports and documents I received from the gardens were loaded into the program Atlas.ti. The coding of data occurred based on the concepts that came out of the desk study beforehand. The codes were then arranged in code groups of individual, group and societal levels for better overview. The code book can be found in the appendix II.

3.3 Limitations

Due to the covid-19 outbreak, I could not conduct my research as I had planned to. Originally, I wanted to visit every garden to make observations and talk to the gardeners directly. Because I noticed the most effective way of finding interview respondents was meeting them personally and introducing myself, I imagine that I would have been able to get into contact with higher percentages of the garden volunteers. Furthermore, almost all of my respondents were older than 45 years and a lot of them were already in retirement. By this, I might have gotten to see a distorted picture of the identities as I missed out on the young voices. Therefore, it can be questioned to what extent I got to see the full picture and the collective identities are truly 'collective'. A further reflection on these limitations can be found in chapter eight.

4. The four community gardens

This chapter provides an overview of the four gardens that were researched in. Information is given on the history and organisation of the gardens. With these short backgrounds, the results that are presented in the following chapter can be better placed and understood.

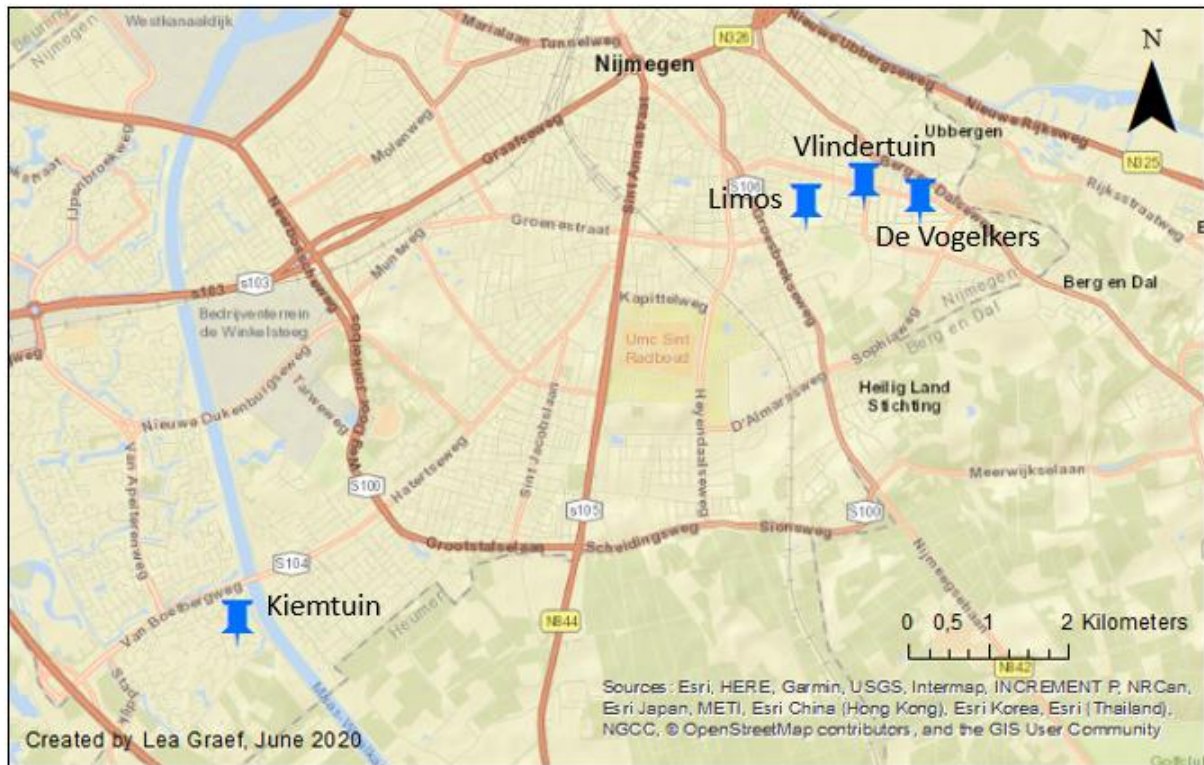


Figure 3: The locations of the four community gardens (Graef, 2020)

4.1 The Vlindertuin

History of the garden

The Vlindertuin (Dutch for Butterfly-garden) is situated in the eastern district of Nijmegen and celebrates this year its 25th anniversary. Before 1995, the Vlindertuin was a little central park in the neighbourhood Hengstdal but was used as a storage ground for sewage pipelines and other building materials during renovation works of the surrounding houses for two years (H.Horstink, personal communication, 29 May 2020). Then in 1995, a group of neighbours took the initiative and started to transform the park into a garden that should attract butterflies with native and endangered plant species. They received support from the municipality and local businesses (25 jaar Vlindertuin Hengstdal, 2020). The municipality built paths and a square that were designed by a volunteer in the shape of butterfly wings. For a period of five years the group was very active but then members gradually stopped and after ten years no one was left (H.Horstink, personal communication, 29 May 2020). Since 2015, the current group of volunteers is maintaining the garden. Back then, active local residents took notice of the neglected garden when a monument for a Roman aqueduct was placed on the corner next to it (H.Horstink, personal communication, 29 May 2020). Since April 2019, the Vlindertuin also has a greenhouse where another group of five volunteers is growing vegetables. The idea is to organise a harvest party once per year and cook a free meal from the vegetables grown for people in the neighbourhood.

Organisational structure

Today's group consists of four permanent members and some others that occasionally help out. Every third Saturday morning of the month, the group comes together and works in the garden for two to

three hours. They also hold a coffee break where freshly made apple pie is served that is baked in a stone oven that one of the volunteers built (see figure 6). Generally, the garden is open to everyone and the group likes to invite interested people and the neighbourhood to join. The garden is in contact with the municipality and receives support from them. They supplied them last year with a water tap point. Before, the gardeners used a water container that was filled regularly by the municipality. The municipality also takes care of the plant waste, cutting the trees and occasionally gives them plants. However, a large part of the plants come from the volunteers themselves. Usually, one volunteer that lives close by brings many gardening tools for everyone to use. For special tools and equipment, volunteers bring something from their homes, or the municipality is contacted.



Figure 4: The Greenhouse (Graef, 2020)



Figure 5: A pond where a lot of frogs live (Graef, 2020)



Figure 6: The oven (Graef, 2020)



Figure 7: A path (Graef, 2020)

4.2 Kiemtuin Weezenhof

History of the garden

In the beginning of 2015, a group of enthusiastic neighbours came together with the idea of starting a communal vegetable garden for strengthening the social cohesion in the neighbourhood of Weezenhof, located in the south-west of Nijmegen (Kiemtuin, n.d.). With support from the municipality, the volunteers began planting the garden in the summer of 2015. In the past, the volunteers have organised several harvest parties and get-togethers for people in the neighbourhood and a little garden for children to learn about nature and gardening (Kiemtuin, n.d.).

Organisational structure

The current group is rather large with 18 volunteers. Not everyone is involved in the same way. Within the group, there is a permanent core around the initiators and knowledge holders that is more active.

The garden is divided into different beds (= a small patch in a garden where plants are grown) where different plants are cultivated. One or two volunteers are always responsible for a specific bed and thereby have the task of cultivating only one or sometimes also more types of plants. Volunteers keep their designated beds over time and because the planting follows a seasonal rotation scheme, they learn every year how to grow something else. They came up with this idea after noticing that some gardeners with less experience did not know what to do, so with this scheme everyone could learn and focus on one thing at a time (Anonymous, personal communication, 26 April 2020). Usually, every volunteer brings their own gardening tools when they go to the garden. The cultivation plan is set up collectively at the beginning of every year and features generally known vegetables, berries as well as flowers for bees and other insects. They also have a little area called a 'trial bed' (probeerbed) where volunteers can experiment and try out new sorts. Currently it is dedicated to Mediterranean herbs. When seeds and plants have to be bought, usually one volunteer makes a list of what to buy. They have a shared pot for money that they also have present for donations during parties and get-togethers with the neighbourhood. In the garden, they have a water pump that they got from the municipality that supports them also with other things like wood chips.



Figure 8: The Kiemtuin in April (Graef, 2020)

4.3 Buurtmoestuin De Vogelkers

History of the garden

The community vegetable garden De Vogelkers exists since 2017 and is situated only a few hundred meters from the Vlindertuin. It used to be a green space between flat buildings with mostly shrubs growing. In 2017, local residents worked together with the municipality to turn the green space into a vegetable garden. Today, the group consists of 10 volunteers that mostly live in the surrounding buildings and the neighbourhood.

Organisational Structure

The volunteers have agreed with the municipality to maintain the piece of land in turn for being able to freely use it for growing vegetables and fruit. They are being facilitated by the municipality with water and wood chips and received fruit trees and willow branches to make a fence. The garden has a compost heap and a water tank that the municipality regularly fills.

Within the garden, every volunteer has their own plot but there are also beds that are taken care of collectively with plants like potatoes and strawberries. Within the group, there is a more active core of four volunteers who want to stimulate more collective activities like the communal plots. The group comes together once a month to deliberate and work together in the garden. Every gardener brings their own gardening tools. However, tools are also being shared and exchanged when needed.



Figure 9: Beds in De Vogelkers (Graef, 2020)



Figure 10: View from the street (Graef, 2020)

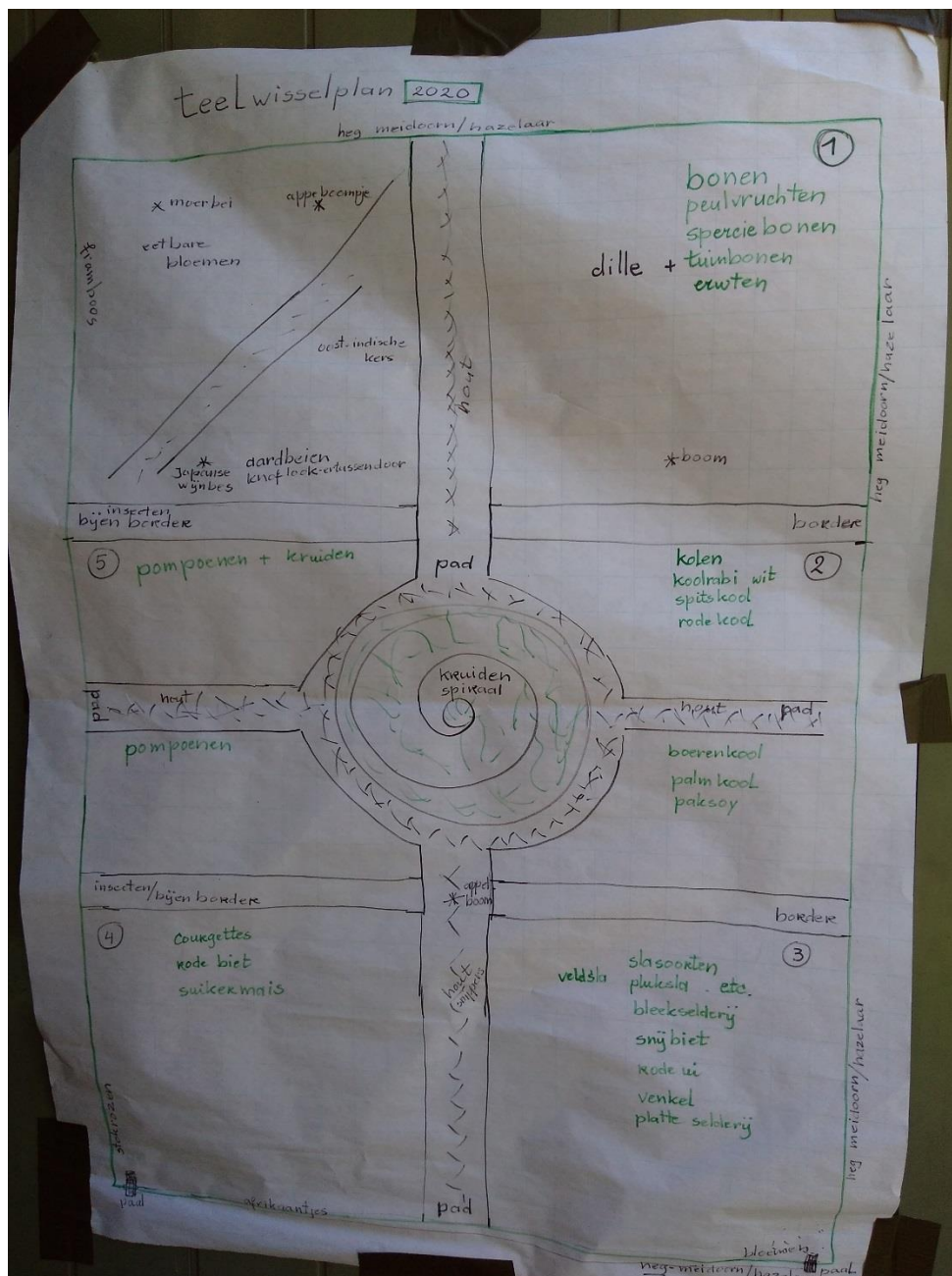
4.4 Buurtmoestuin Limos

History of the garden

The community garden Limos is situated in a residential complex that used to be the ground for an air force instruction and military training school until the year 2000 when it got restructured. It was initiated in 2017 by a working group of the housing association 'De Gemeenschap' (Eetbaar Nijmegen, 2017). They quickly received support from the municipality and asked the neighbours to participate in the garden by putting letters into mailboxes and writing in the local neighbour newspaper.

Organisational Structure

The group consists of eight permanent members. Once per month, they invite people from the neighbourhood to join them working in the garden. The gardeners themselves used to arrange fixed collective working times but stopped with it and now they are just spontaneously coming together. At the beginning of every year, the volunteers collectively create a cultivation plan (see figure 13). The organisation of tasks happens spontaneously and by own initiative. While some like to sow plants, others buy pre grown young plants from growers. The group can make use of the gardening tools of another group that maintains the green space around the residential complex. The Limos garden also receives facilitation from the municipality that supplied them with materials for a spiral herb garden (see figure 11), fertilizer and wood chips.



5. Results

In this chapter, the results of this research, the insights and information collected during field work are being presented following the structure of the subquestions. The fieldwork lasted from April until June 2020 during which participant observations were held and a total of 11 volunteers were interviewed. The information reported in this chapter comprises quotations from the respondents in order to support the findings in a concise and original way. The quotations were translated from Dutch to English and entail phrases and pieces of dialogue that are indicated by the use of italics. The letter 'I' indicates the interviewer and the letter 'R' the respondent. To ensure overall readability, the quotations were edited, however the content was not changed and during translation attention was paid to accuracy. For every quotation, it is indicated which respondent made the statement by using a code consisting of the letter 'R' for respondent and a corresponding number. An overview of the respondents is listed in the appendix III. The respondents are aged between 29 and 70 years old with almost three-quarter of them between 60 and 70 years old. Everyone has been active in a garden for at least one year. Mostly, they live in close proximity and thereby discovered the gardens if not initiated by themselves.

The results for the first subquestion are presented in the first and second subsection of this chapter, discussing the personal motivations, goals and reasons for the respondents to join a community garden as well as analysing the relationships and group dynamics within the garden groups. Next, the findings around the second subquestion focussing on the perceptions of community gardeners around the dominant discourses about sustainability are presented in the third subsection. Hereafter, the fourth subsection follows where a look is taken at to what extent power relations influence the collective identities of community gardeners. Finally, in the fifth subsection, it is analysed how the collective identities connect to societal transformation towards sustainability in line with the fourth subquestion.

5.1 Defining the meaning of action

Reasons, motivations and goals

The most often mentioned reason when asked why the volunteers decided to join a community garden is building connections to other people. All of the volunteers already had an affinity with gardening before joining but were intrigued to use this hobby for getting to know people from their neighbourhood, for example after moving there. More than half of the respondents have their own home garden that would also give the possibility to pursue gardening and growing vegetables within limitations like cardinal direction and space. Considering this, it comes to no surprise that it was the feeling of being part of a community and forming new connections that caught their attention to join. For the respondents who do not own a garden however, the building of connections is also an important motivation apart from the opportunity of growing food.

All of the volunteers are fond of gardening. They talked about enjoying being outside, with the hands in the ground and connecting with the earth; *And uh yes things like this involvement with the self and the earth, uh I am just talking for us, that has not only potential but also keeps me well with my own awareness of how I want to be in the world... And what I want to give and what I want to receive. And yes, that's why I like to be here... and I'll see what it yields* (R5).

Gardening is not only beneficial for keeping the body fit but also the mind healthy. It can mean the reliving of positive memories. One volunteer joined a garden because he used to walk around in the area in his youth and held fond memories of the places. Another remembered a garden where he used to work;

"I am also often sensitive. I have good memories of uh the atmosphere so to speak. So in the garden where I was back then, I preferred to work in the evening uh... then there is a certain atmosphere that... I like then to... yes, what I did back then, huh? Talking or listening or something... just with your companion... To put your hands in the ground and talk about all

sorts of things and that you contribute... yes to a piece of ecology or... uh a kind of example to people like hey that's also possible" (R3).

However, gardening was also described as hard and time-consuming work where I will come back to in section 5.3.

There is a distinguishable difference in the motivations of participants of the three food gardens and the Vlindertuin. Because the Vlindertuin focuses on enhancing the local biodiversity and being an open meeting place in the neighbourhood, not surprisingly all of the four volunteers mentioned to be motivated by the feeling of doing something meaningful for their environment. Whereas gardeners that committed to growing food more evidently get something back for themselves, namely the harvest, the Vlindertuin gardeners have a more altruistic profile. Whilst of course they have their own personal rewards, it comes less in a materialistic and immediate form. Yet, also the food community gardeners spoke of the meaningfulness of their work for the neighbourhood as one of their motivations; *"Secretly I also like, and that's really my third motive, that there also came a little cohesion in the neighbourhood through the garden. That people walk by and stop and have a chat. Yes, that has also shown itself over the years" (R6).*

Young parents also seem to join community gardens amongst other reasons for their children. It is a possibility for children to learn about nature and see that food does not just come from the supermarket. But also like a young mother elaborates; *"And I also like that I can pass that on to my children. On the one hand that we do something for the nature in the neighbourhood, but also that they deal with people they otherwise would not have learnt to deal with. And what I really like is that everyone really accepts them and sees them as part of the group" (R10).*

Many gardeners mentioned gaining a different relationship to their environment. By getting to know people in the neighbourhood, giving shape to the landscape and creating collective memories, a new sense of place is formed. The feeling of self-efficacy is also very important for the volunteers to keep gardening;

"I am trying, when we are here, also because you drink coffee together and share with each other a bit how everyone is doing eh... I try to make a kind of connection with each other. Which also makes people enjoy coming here again. Although the grass comes back every year... But to let people still enjoy coming to work in the garden for one or two hours to do something. And when you come back, you can see okay there are some new plants over there or there is a piece weed free or the path looks neat again. Just those little things that make you happy" (R8).

To sum up, the meaning of their actions is derived from personal benefits as well as perceived benefits for the local communities. The gardeners have the feeling that they are able to shape and mean something to their environment and with this feeling of self-efficacy and sense of belonging, they enjoy their practices. The meaning given to their practices is also established by making connections and maintaining relations to others which is discussed in the following section.

5.2 Relationships with other gardeners

Group dynamics, shared values and sense of community

To gain insight into the field community gardeners practice in and the opportunities and constraints for such action, the gardeners were asked about their relations to other gardeners and their sense of community. A discussion of other opportunities and constraints in the field of action next to the group relations can be found among the following two subquestions.

In all four gardens, the respondents described their groups as pleasant and friendly. Some of the gardeners mentioned meeting other gardeners also outside of the garden, but in general, the contact mostly remains within the garden borders. The majority of the respondents said to enjoy the connection to other gardeners and feeling involved with their lives. Particularly this involvement is

experienced as satisfactory; *“Yes you get to know just a little more than mere things. It is... uh yes I like (...) to hear how everyone is busy with their lives, huh. And yes you need that”* (R11). Meanwhile no respondent really referred to other members of their group as friends, they often used the phrase a different kind of friend. A volunteer from the Vlindertuin described the relations as following;

And when you work together in the garden, you also get a kind of connection with each other. Uh friendships don't always have to be about being able to talk to someone well and I will visit them or go for a walk with them. No friendships can also be that we just see each other at set times. In a permanent place. We are going to work there. We all do our own thing. But we do drink a cup of coffee together and we hear how it is going. So during the coffee. So that's also a kind of connection (R8).

When asked, every gardener answered to indeed feel as part of a community. Within the groups, however, not everyone is involved the same way. Some gardeners put more of their personal time and effort into the garden than others; *“So I certainly think that we all share the same view but you can see that everyone is searching for their own garden within this view that fits him or her. And we know that by now from each other yes”* (R10). This occasionally comes with problems because other members feel guilty for their lack of time or inactive members are being frowned upon. Also, differences in opinion and disagreement lead to conflict within the groups. Past and present conflicts were mentioned during the interviews that were all caused by colliding personal values and meanings of the gardeners. Different gardeners envision the garden differently and this causes conflict. One volunteer of the Vlindertuin talked about a past disagreement over the oven he wanted to place in the garden;

I wanted that oven and other people thought it didn't suit a garden. You cannot do that. Nothing can be built. Then I said, I think that's a shame because it also has another function... you want to attract and recruit people and this seemed interesting to me... to make it attractive and fun so to speak. Well, that is not possible for some people. For them it's... an organic and ecological garden and it's for butterflies. That goes above everything else. And you can be of service to that and nothing else. And in my opinion the social is very important (R11).

For the success of a community garden, a shared understanding of values and meaning is very important. Everyone is allowed to hold their own opinion, but the garden should remain a *“beautifully carried whole”* (R5). In the Vlindertuin, the volunteers talked about what they think is important in the garden. Foremost, it is a social space for the neighbourhood and a garden with wild and local plants to attract butterflies. However, the respondents also mentioned not being too strict regarding specific plants. In the Kiemtuin, the members want everything to be done organically with no artificial fertilizers. Yet, they also emphasised that *“nothing is set in stone”* (R4). A shared understanding seems to be able to develop naturally there as two volunteers of the Kiemtuin elaborated;

R5: Look if we were such a group that only does it like this or that... then I wouldn't have liked to join.

R5: Yes

R4: Well there is no selection on who will join or something.

R5: No

R4: That goes a bit by itself. There are people who are consciously engaged in... er... food and the earth I think.

R5: Yes I do that myself as much as possible. But it's not something I put on someone else.

R4: No. So we don't select on it, but I think it happens anyway automatically.

In the Limos Garden, there seemed to currently be a difference in opinions among two of the members that created some tension. One volunteer also talked about the importance of not placing oneself's vision of the garden upon others; *"I try to often motivate people to do everything organically. According to permaculture, but... not everyone is open to that, but I have accepted that. Then you have to move along in the group, right?"* (R1).

Despite personal differences, the respondents said to have the feeling they do have influence on what happens inside of the garden. Overall, the groups seem to experience and adapt their ways of organisation following the principle learning by doing. Following an organic process, knowledges and abilities of the members determine organization and performance. Different knowledges are shared, valued and perceived to grow over time. The acquired knowledge is locally based and community specific. It was emphasised that they learned over time what plants would grow, which not and how to organise in the most beneficial way. Respondents from the community garden De Vogelkers highlighted that they are still finding their ways and inventing themselves as part of a process. Every year they grow closer together;

I: If I summarise it a bit then it is a very nice group but... there is not a very strong connection?

R6: No not so strong... well stronger than last year for example. (...) Yes, because we are developing. (...) and we also exchange a lot of thoughts. For example, I keep saying that I would like to do more things together. For example, if you have a zucchini plant, you can harvest a lot from it.

I: Yes yes

R6: So everyone had last year their own zucchini plant in the garden.

I: Ah that's not really necessary, right?

R6: Not really no. So yes, if you say what would you like for the future, I would like a garden where a number of people are planning together.

Next to the inner complexity of the actor, their relationships with other actors defines the meaning of their action (Melucci, 1996). The results have shown that the gardeners value the contact with other gardeners but also that not everyone shares the same understandings and perspectives. An overall shared definition of meaning can be broad but is important because conflicting meanings can create frictions and be constraining in the field of action.

5.3 Collective identities and sustainability

Worldviews, personal values and sustainable practices

To answer the question of how the identities of community gardeners relate to the dominant discourses about sustainability, respondents were asked about their ideas, dreams, thoughts and practices around the concept of sustainability.

In general, all of the respondents expressed an environmental conscious and concerned view. In line with Guiney & Oberhauser (2009), a lot of the members of the community gardens mentioned feeling a strong connection to nature that began already in their childhood or youth. Every respondent said that sustainability does play a role in their everyday life. When asked about their sustainable day-to-day practices, activities like buying organic food and second hand products, taking the bicycle over the car, recycling, eating no or less meat and consuming overall less were mentioned. A lot of the respondents added however, that they do not always act stringently according to their values and sometimes trouble themselves with cognitive dissonance. Inconsistencies would arise but they try as much as they can to adapt sustainable practices and still live a good life. Respondents mentioned that this can be hard but also not being too strict on themselves. This could imply that the gardeners do not show radically different opinions to dominant culture as sustainable practices are sometimes perceived as 'sacrifices' or not compatible with the 'good life'. One respondent exemplified not to live dogmatically and by that being able to inspire others more. They often also referred to themselves as

not a “*geitenwollensokken type*” (R1), a term that describes people following an ‘alternative’, naive and unrealistic ideology maybe best translated with the phrase “living in cloud cuckoo land”. This expression demonstrates that the gardeners want to be taken seriously and remain relatable to outsiders. Therefore, they do not differentiate themselves completely.

The community gardeners are conscious about the consequences of their everyday practices and try to reflect as much as they can on their choices. For a lot of them it is important to know where their food comes from and how it was produced. The wish was often expressed that the agriculture sector should be more small scale, locally and worked in out of passion. Overall concerns over the unsustainable behaviour of western societies were exemplified such as consuming and wasting too much, but also missing social connections between people and to nature. One respondent spoke of the notion in our society that “*nature exists primarily for us humans*” (R10). She especially detested the interpretations driven by economic value; “*But it bothers me when they explain that it is very important to preserve nature because it can also produce a lot of money you know? Or that... converting of natural values into money. I understand that this can also be a way to convince some people to do something for nature, but it really bothers me because it assumes that nature is only there for us*” (R10).

Furthermore, respondents talked about a perceived misuse of the concept. One gave a local example;

I have had a lot of conversations about that... the term sustainability has actually become a kind of container concept, huh? Become! It wasn't like that first. Uh... sustainability means for me that you are acting on something that will benefit you in the long run and which is good for the environment, right? But in the Green Capital year the word was also sometimes misused... suddenly everything was sustainable. I heard the craziest things about... er sustainable walking, going out sustainably,(...) (R1).

When asked what sustainability meant to them, a lot of the respondents expressed difficulties they had with defining the term; “*Yeah that is always a difficult one... it is really a very broad concept, but for me there is certainly the sustainable future idea in it. That you make sure that the following generations... uh that you don't exhaust the resources.*” (R10). The concept is perceived as broad and also individually distinctive in line with the findings of Evans and Abrahamse (2009). Additionally, the gardeners appear to have normalised categories like climate change and reducing air travel as part of their understanding of sustainability; “*So that's nice when you recognise that again among each other... yes that's just the love for the earth and the realisation that sustainable living is just as important as thinking about climate change and airplanes and stuff like that*” (R5). What always came back in the definitions that the respondents gave was preserving, respecting and living in harmony with nature. Furthermore, the importance of the social dimension in sustainability was emphasised;

I: Does sustainability play a part in your life?

R11: Yes it plays a very big role but I think especially social sustainability is important. To do something with people. So when something is said here that sustainability is important and you shouldn't build an oven then I think nonsense. Social sustainability is also important. People should inspire each other and do something together and er... don't refrain from it because it is important for 'sustainability'.

The belief was expressed by multiple respondents that more social connection between people is key for a sustainable future. Through connections people can motivate and inspire each other. A lot of the respondents elaborated during the interviews that what they practise are all just small efforts but despite that, they believed that every little thing counts and “*you have to start somewhere small yourself*” (R5). This shows a strong believe in the strength of agency. Members of the three vegetable

gardens said that they would like to see more community initiatives growing food in urban areas and that they can set a good example to other people in the neighbourhood;

If you do these kinds of things then you demonstrate.. uh.. you are not taken care of as a citizen by the welfare state. You have to do a lot of things yourself. And by demonstrating it, people also notice okay... it is possible! You can just ask the municipality to dig over a piece of land and then you can start. These are all small things, but the signal is to other people... you can just develop your own little initiative... And that it is possible (R4).

In the Vlindertuin, similar thoughts were expressed; “And then I think that every little bit helps and such a piece of nature in the city... well it is of course far too small and there should be much more of this and I would like to contribute to that” (R10). The breaking down of global problems to local everyday life and strong belief in self-efficacy is mentioned also by Grabs et al. (2016) as one of the key determining factors for participating in grassroot initiatives.

The community gardeners present a very bottom-up oriented and hands-on approach to sustainability. For success, people must inspire and motivate each other. The gardeners expressed thoughts to not rely on the state to put a sustainable society into execution. However, they do see the government in a crucial position to support and facilitate. Notably, no respondent really mentioned a kind of technocratic solution to the problems around unsustainable practices. Technology was only mentioned in relation to aid and support on the path to a sustainable world. This shows that their understanding of sustainability might be different to ‘dominant’ discourses that view clean technologies as sufficient for addressing the world’s problems. However, because collective identities emerge among prevalent structures and discourses, they do not remain uninfluenced by them. As mentioned, the collective identities also show tendencies to have normalised societal categories in their understanding of sustainability and do not distinct themselves fundamentally by wanting to be recognised, remain relatable and perceiving sustainable lifestyles as deprivileging.

5.4 Power relations and identities

Organization, access, knowledge and time

While the second subquestion deals with the relationship between collective identities and powerful discourses as well, the third subquestion allows for a deeper engagement along the social dimension and the ways power relations might define the gardeners’ collective identities.

Collective identities are linked to a shared collective action project but also to their context, political field and organisational structure (Flesher Fominaya, 2010). Melucci (1995) spoke of the actor and the system reciprocally constituting themselves. For gaining insight to community gardeners’ identities’ connection to societal transformation, it is therefore important to look at the field, community gardeners exist in and to what extent power relations might define their collective identities. For this purpose, questions were guiding like: Who is joining and who would (not) be able to join? In what way and by whom are decisions made? Which factors are limiting and preventing someone’s participation?

Cheney et al. (2004) state that social action towards sustainability is equally in state to create inclusive change as it is to exclude and oppress. As already mentioned in the theoretical framework, community gardens have been linked with gentrification and displacement before in academic literature (Certomà & Tornaghi, 2015). They are also perceived as playing a part in the neoliberal system in connection with reduced state responsibilities and neoliberal citizenship (Ghose & Pettygrove, 2014). While these facts show uneven power relations between community gardens and their environments, power relations can translate into the gardens as well. Egerer and Fairbairn (2018) found in their study that inequalities and racial tensions associated with capitalist urbanisation can influence and shape community formation in gardens.

Analysing the data collected in this study, the first thing that became apparent was a certain homogeneity in the gardeners' profiles. All of my respondents are well educated and among the groups, the average age seemed to be at least 50+. Respondents that were in retirement would often tell that they have more time to engage in gardening but other sustainable practices as well since they stopped with working. In contrast, gardeners who still worked would regret the fact that they do not have enough time and cannot take many extra responsibilities. Next to their work, taking care of family or having young children is time constraining. The factor of time seems to be an important limiting factor for deciding on who participates;

R4: Yes and the people who pass by and talk to you all really like the garden. (...) You often also get an excuse for why they can't participate themselves, but they do really like it.

R5: Yes it is... also quite a lot if you already have a very mentally or physically exhausting job.

R4: Mhm

R5: Even though you often really want to do something... it is quite difficult.

This factor of insufficient time does not only translate into who might join a garden, but also who has more authority. The ones that have more time and are able to engage more in the gardening practices are the ones that can make more decisions and carry responsibilities, for example by being the person that buys the seeds or the one that is in contact with the municipality; *"X speaks to many more people because he is retired so he does all kinds of things. So he can easily look for new volunteers because that is always an important point. Yeah, I am still working four days a week, so I have much less time for that"* (R8). Although in every garden, everyone could contribute and have an influence to the same extent, in practice, it not only depends on time but also on knowledge. Some gardeners have more experience with gardening than others and thereby take over a leadership role. This can occasionally create irritation and conflict; *"I have eh... had my own vegetable gardens in the past before and someone else in the group as well, but the rest not. But some are open to learn from me and some get very annoyed. So yes... you know? That's always difficult with groups, right?"* (R1). However, gardeners do not necessarily perceive it negatively when someone else with knowledge takes the initiative as volunteers are often glad to be able to learn new skills and tasks;

"Well actually, X is the one who came up with the concept. He has devised the seasonal rotation scheme and he has the knowledge of what to plant together and how to do things. He understands and knows the processes and actually most people who participate... have less knowledge than him. So if someone has an idea then uhm... well usually people do not have so many ideas to do things themselves. So most people are just happy if they can participate in the plan" (R4).

"And if we give instructions to people like for example last time, then they especially like it when you say: do you want to do this or that? Thinking along about how we should organise... er that is a bit more difficult because some people just don't have time for that. Or don't have the knowledge" (R8).

In fact, having authority and carrying responsibilities are possible by taking the initiative. In all gardens, respondents talked about democratic and open deliberation where theoretically everyone could come up with their own ideas and plans. Naturally, however, with a difference in engagement and activity but also knowledge, a hierarchy emerges;

I: How does that go when you make decisions?

R9: Yes we make group decisions, but you see, there are a few people who, of course, with their enthusiasm, pull the cart more than others.

Some of the more active and engaged gardeners that I spoke with in the Vlindertuin and De Vogelkers, wished that more people would take initiative, carry responsibilities or actively participate because they valued input and sometimes felt overburdened.

In the Kiemtuin, Vlindertuin and Limos garden, the gardeners make use of cultivation plans. Whereas in the Limos garden and in the Kiemtuin, respondents said to create and approve the plans all together, in the Vlindertuin one gardener took the initiative to draw a guiding plan and consulted with the others. Decisions are either made by the whole group or are introduced and then have to be approved by the rest. While visiting a gardeners' meeting in the greenhouse at Vlindertuin, I noticed that occasional disagreement could be solved by elaboration and explanation so that a consensus could be reached. However, the possibility for everyone to come with ideas and proposals was emphasised in every garden. Yet, although the openness is highlighted, sometimes gardeners can feel their input is not valued and might even leave the group;

"And there was also once someone who came to have a look and who had the idea of putting a beehive here. I already got a bit nervous when I heard that because I am allergic to the stings. Yeah, he got... You could see that he got the feeling that he... yes that he was still too new. And we never saw him again, he lived there around the corner" (R9).

"But that was... he really disliked that I forced my point, that was how he perceived it. While I... I thought, I also want to be able to do something my way" (R11).

Exclusion may play a role even earlier. The Limos garden, the Vlindertuin and De Vogelkers are located in the neighbourhood Hengstdal and the Kiemtuin in Weezenhof (see figure 3). According to the municipality, both neighbourhoods are above city average and belong to the highest housing market segment due to the real estate values and economical positions of the residents (Gemeente Nijmegen, 2020). While there are a lot of community gardens in Nijmegen, one respondent mentioned that she thought these are typical in Nijmegen-Oost (the eastern district of Nijmegen), because people are more politically left-wing and are often open and interested in actively doing something in the neighbourhood (R7). Whether being situated in a well-off area is a necessary condition for community gardens cannot be evaluated in this study. Ghose and Pettygrove (2014) found however, that while opportunities for community garden development exist, the ability to take advantage of these opportunities really depends on having knowledge and material resources to get access and make institutional connections. In the cases of the four gardens studied for this research, the municipality and other institutions like housing corporations are or were indeed playing a role in the development and facilitation. In a leaflet about organising and starting a community garden, the municipality states that gardeners have to make a plan themselves and present it to the municipality (Gemeente Nijmegen, 2013). They also should seek support from businesses and search for sponsors. It is arguable that for starting a community garden, knowledge and resources that not every citizen has, are required.

My respondents were, as already mentioned, all well-educated and can, based on their professional backgrounds, be allocated to the middle or upper-middle class. While all of the gardens are open spaces where people are allowed and often also actively invited to come, the gardener groups remain mostly homogenous. Gardening does not seem to be for everyone, on the one hand, as one respondent exemplified, you have to like it to keep doing it;

"Because I think, uh, if you participate in a vegetable garden, then you should primarily... uh... like to put plants in the ground and that is much more complicated than you think. Because this year, I am sowing for the first time. And I only managed this year for the first time to just do it at home in pots. To keep it under control, you really have to be there every day. And that... that is more of a challenge... but I have in the back of my mind that I like it" (R6).

On the other hand, there might be limited access for people with other backgrounds. While there are efforts made to invite people to come, for example at the Vlindertuin, not a lot of people show up; *"And then can people from outside, so to speak, join but they don't do it you know? A few do. But that is what it's intended for"* (R9). Also at the Limos garden, respondents reported that people are interested, for example when they walk past the garden and start a conversation; *"You know, they give advice and... and those talks are also very nice, you know? But it remains at that, right?"* (R2). The respondents had their own suspicions why people would not show up;

R3: Yes, but yeah... we don't really convey the impression, at least I don't convey the impression that we want more people here. I think... we are with eight, so that's actually more than enough so... so people can join for the monthly working days.

R2: Yes well... that is of course per person differently, right? Because... X is very accessible so at least... she gets into contact with people very easily. So that differs per person.

R9: Yes the garden is for everyone, right? Because the... the only drawback that sometimes presents itself is that people get the idea: oh there is a group busy... ah then that garden might be eh...

I: Ah yeah

R9: I get that idea sometimes when people walk by and I ask if they want to join for a cup of coffee. They are almost startled.

So despite efforts to invite outsiders, the impression of a closed group can seem daunting and might repel people from coming. While in the garden De Vogelkers, also one refugee person sits among the group, the data collected indicates that it is not very common for people with different socio-economic and/or ethnic backgrounds to join. Coming of as closed groups can surely play a role, but it might also exemplify social inequality. The collected data in this research is unfortunately not sufficient for making a decisive statement whether among the gardeners also people with a different socio-economic background exist and whether there are sufficient opportunities for people with other socio-economic backgrounds to participate. The homogeneity among the respondents can also be due to missing voices. The collective identities studied within the scope of this research have shown however, that hierarchies do exist within the groups based on factors such as time and knowledge that can be even excluding to outsiders. Through the homogeneity of the groups, the impression can be further conveyed that others are not able to participate.

5.5 Relating to societal transformation

Changing and being shaped - the reciprocal relationship

This last section of the results chapter focuses on the ways, the collective identities relate to societal transformation. In other words, the reciprocal relationship between community gardeners' identities and practices and their environment. Not only are identities shaped by, they are also shaping their surroundings and a look is taken at what this might mean for society as a whole.

Community gardens have an immediate influence on their spatial surroundings. In all of the four cases studied, the spaces they inhabit were previously empty or perceived as not particularly attractive. All respondents mentioned that they receive positive feedback from people in the neighbourhood on a regular basis; *"People also really enjoy it when they walk by. Yes and you also get that back by: What does it look beautiful, or it's so nicely maintained, it is a feast for the eyes"* (R1). However, there are also negative voices. Some residents perceive the gardens as not orderly, unsightly and would prefer the municipality to maintain the spaces. Occasionally, the gardeners get into conflict with the neighbourhood. De Vogelkers and the Vlindertuin have to deal every now and then with unsatisfied local residents that complain about their appearance or the smoke that comes from the oven. In the Kiemtuin, constructions were damaged, materials disappeared or were stolen. According

to the respondents, however, the positive feedback outweighs, and it was mentioned that disagreeing neighbours are normal everywhere.

The Vlindertuin, the Limos garden and the Kiemtuin regularly organise parties or participate in social activities to involve and present themselves to the neighbourhood. Harvest that is left over gets shared by the Limos gardeners with the neighbourhood. The Vlindertuin invites people every month to come for apple pie and coffee and in the past, a free harvest meal for the neighbourhood was organised where food grown in the greenhouse and in the Limos garden was used. In the Kiemtuin, they held bonfires and harvest parties as well, and had a programme for children to learn about growing food. Yet, invitations are not always responded to;

"They are invited to come. But nobody responds to that either. Or... quite little. What helps a bit, and we have done that at the Vlindertuin sometimes, is putting a note in mailboxes everywhere. There you say: next Saturday we are having coffee and cake and then... sometimes two or three people show up. But also no more than that. Two or three. And you have to put a hundred notes in the mailboxes (R11).

However, all of the gardeners spoke of getting into contact with people that pass by;

"Yes we have made every effort to involve the neighbourhood. You know by flyers, by writing in the neighbourhood newspaper, well if you want to help you can. People who walk by also sometimes ask but it does not yield much, you know?. But people are interested and, what you can see very often is that they, and we really like that, you know people ride on their bikes, walk by, let out their dogs and always are very interested. You can see parents who explain to their children: that's a pumpkin and that is... you know it also has that function" (R2).

Outsiders of the garden stop and have a talk and sometimes even give the gardeners plants, seeds or materials or have some tips on how to do something another way. Respondents also mentioned enjoying the chats and liking to explain and passing on knowledge; *"And when I'm working in the garden (...) I like to explain what is growing there and what you can do with it. For example with the herbs, what they are good for, you know? What they are beneficial for. And uhm... but I also want to let people experience. (...) it is the intention that we also share, right?" (R1).* The gardens serve thereby an educational function in an informal setting. People walking by can see how plants grow and might build awareness (R7). The hope was expressed that people even get inspired and start their own vegetable garden. The Vlindertuin, which focuses on local biodiversity, is able to educate people and let outsiders experience as well;

"And that there is a piece of nature so accessible in the neighbourhood where you can see and even catch frogs, where you can encounter a bit wildness, I think that is really important... for the neighbourhood, also for nature right? With the stepping stones in the city. But surely also in the long run for sustainability, if you want to express it that way, because I am convinced that to let people come into action for nature, it is essential to have that meaningful interaction with nature. And if that is not possible in your area, it will not work out for a lot of people. Because a lot of them won't go far to go to the forest and children are also not able to" (R10).

As this respondent elaborates, spaces like these are useful for getting into contact with nature and are especially valuable in the city as they are accessible also for children. In the Vlindertuin, respondents mentioned that it would not be liable for the municipality to maintain such urban gardens. Therefore, community gardens are important grounds for learning, experiencing and even forming a connection with nature, considering more and more people are living in urban areas.

As already touched upon, community gardens are thought to be positive for building cohesion and connection in neighbourhoods. This was also reported by a lot of my respondents;

"What is nice (...) about the garden, it is not only making me happy because I like to put my hands in the earth, (...) it also provides a very beautifully connecting function within the neighbourhood. That's also one of the goals, isn't it? There runs a path next to it and people often begin a chat about: What are you doing? What is growing there?" (R1).

"Yes, it also gives a lot back to uh... even though people are not socially involved, there is still a certain cohesion (...) And that is already a starting point, right?" (R5).

Respondents further reported to have much more social connections to people in the neighbourhood since they started in the gardens;

"We have been living here since 2005 and in the first few years we really had no contact whatsoever with people from the neighbourhood. And since we are doing this, we know people from the neighbourhood. So it does work" (R4).

"(...) I know now a lot of people that I knew before only by face. For example, the man on the corner, I had seen him sometimes and maybe said good day but now uh... he is always alone, he is a bit sick and he... well he told me all of that himself. That's nice! Yes, and I also think X from Eritrea who is also alone and likes to work in the garden, she also likes to meet us. (...) Well like this you already mention two things, but there are many more contacts" (R6).

The level of social alienation in the city can be reduced. One respondent reported that even conflicts in the neighbourhood might be solved by that;

"(...) and I think the eh, we call them "the cheerful guys", I think they are often problematic. The police sometimes comes when they make a ruckus or won't stop or are too drunk. And when we are working there, most of us, some of us don't dare to and I can understand that too, but then eh I always chat with them for a while and then eh... they are not waiting for that but they do like it. And I think if anything would happen, they might help to solve it... I hope. I think that's a side effect of such neighbourhood gardens" (R6).

Additionally, unwanted behaviour might be prevented because community gardeners are maintaining open spaces. One respondent mentioned that since she is working in the garden and maintaining her plot of land, she noticed that less garbage is thrown into the field (R7).

While it was often pointed out by the respondents that the gardens are intended for everyone, they also have to occasionally defend themselves;

"You also have to, I mean when someone passes by and stops to have a look while you are at work, then we always explain a bit how and what. And we also have to do that because I once told someone that the garden is open for everyone and then a day later, such a person just comes and harvests although he didn't do any work. So you have to explain, it is in principle for general use but it would be social to not pick the garden empty if you do nothing yourself" (R4).

Thus, gardens may end up in conflicting situations where they have to find the balance between being for the neighbourhood and protecting their own community.

Upon asking the respondents what they thought were the effects the gardens had on their surroundings, building social connections and cohesion, reducing social alienation and letting people experience where most often mentioned. They called these effects little but meaningful. The gardeners value their gardens not only for themselves but also for the effects they have on their environments; *"Yes, the effect is small but that's alright. And it is a positive thing. It's a positive flow isn't it?" (R9).* Gardening practices can raise awareness around sustainability among gardeners themselves. Like Turner (2011) states that an engagement with embodied practices can shape individuals' consciousness, this was also noticeable for the respondents in this study;

“Yes, last week when I heard of that water shortage again... and I can also notice it in my garden... I took a bath and at a certain point I thought something like: no shampoo, nothing in it, just water. And I am carrying that water to my garden. You know? That kind of... I had not even filled the bath, but I carried it to the garden” (R2).

While the practices shape the gardeners’ identities, it was observable that gardeners translate their ideals and worldviews into decisions around the garden and thereby can influence others. During a meeting of the greenhouse group in the Vlindertuin, participants talked about giving away plants and other goods when it was discussed to ask for a small monetary value to incentivise people to reflect whether they really needed that good. All of these factors might not be of very large effect, however, they still provide opportunities for raising awareness and contributing in the direction of sustainability.

The findings of this study show that the influence of community gardens is perceived mostly positive. Furthermore, connections between people in the neighbourhood and gardeners develop that can reduce social alienation and even prevent unwanted behaviour such as littering. The gardens function as spaces for informal education about food, plants and biodiversity, where also outsiders can reconnect and experience nature. Because community gardeners actively try to engage with people outside of the gardens, they can influence others to a certain extent and might inspire to adopt pro-environmental behaviour. However, the community gardeners also have to protect themselves occasionally as they encounter conflict or damage.

6. Conclusion

In this chapter, the main research question; *How are collective identities and gardening practices connected to societal transformation towards sustainability in four of Nijmegen's community gardens?*, is answered.

This will be achieved by summarising and relating the results from chapter 5 to the theoretical framework in chapter 2. The structure will follow the subquestions. First, I will describe the collective identities of the community gardeners by reflecting on their definition of meaning and the relationships they hold to other gardeners. Next, I will elaborate how the gardeners' collective identities relate to dominant discourses of sustainability. Further, I will review to what extent power relations define the collective identities. After this, I will elaborate on the ways the collective identities relate to societal transformation. Finally, I will provide an answer to the main research question.

6.1 Community gardeners' collective identities

The concept 'collective identities' describes the process by which actors define the meaning of their action and the field of opportunities and constraints for such an action (Melucci, 1996). Therefore, a look was taken at the community gardeners' motivations to participate as well as the relationships they hold between each other. For the community gardeners in this study, two important reasons to participate were identified with every respondent. Firstly, every gardener has an affinity with gardening. Some mentioned it making them remember fond memories of their past. Others spoke of feeling a deeper connection with mind and body to earth through gardening. Secondly, every respondent was motivated to join a community garden to meet other people and build new social connections in their neighbourhood. Gardeners who owned their own home garden were more motivated by the second reason than the first. For the gardeners with no or little possibilities of gardening at home, the first reason was comparably more crucial. So even though the second group is motivated by the opportunity to have a garden as well, the communitarian factor is for all of them decisively appealing. Other reasons to join a community garden that got mentioned were the feeling of self-efficacy in shaping the own neighbourhood, the feeling of doing something positive for the environment and parents that want their children to learn about food and nature. In all of the four gardens, the respondents spoke of friendly and pleasant contact. While a lot of them would not go as far as counting other gardeners in their group as friends, they genuinely enjoy the contacts and sharing topics from their personal lives. Whilst shared visions were recognisable in every garden, differences in opinion occur. Ideologies, beliefs, motivations and goals do not necessarily have to be the same to generate collective action (Flesher Fominaya, 2010). However, they can also lead to conflict that can break groups up and pose a constraining threat. To prevent this, an approach was emphasised that should be dynamic, open and negotiable. The groups are inventing themselves and finding their ways over time, adapting to their environment. In this process, a knowledge pool is created by sharing and exploring local possibilities. The gardeners define the meaning of their actions with the personal enjoyment of gardening activities and the feeling of doing something valuable for and with others.

6.2 Collective identities and the sustainability discourse

It is stated in the field of new social movement theories, that collective identities emerge oppositional to dominant culture practices and by applying non-instrumental rationality, they present alternative ways of practising (Flesher Fominaya, 2010; Melucci, 1995). Previous research on grassroots initiatives and social innovation has highlighted the potential of civil society action for establishing new mental paradigms and sustainable narratives (Grabs et al., 2016; Frantzeskaki et al., 2016). In this research, the collective identities of community gardeners were examined in their relation to dominant discourses about sustainability. Dominant discourses refer in this research to a capitalist interpretation of sustainability that promises green growth and a green economy.

Every respondent in this research showed an environmental conscious and concerned attitude. They were unsatisfied with how current western societies deal with resources and nature as well as progressing individualisation. A lot of them talked about feeling a connection to nature that often started back in their youths. While every respondent reported that sustainability does play a role in their everyday lives and to adopt pro-environmental behaviour, the significance and extent varied within the groups. Suffering from cognitive dissonance in behaviour was reported, however, it was also emphasised that one should not be too strict on oneself. By living extreme or dogmatically, one would lose the ability to inspire others. The gardeners had troubles with defining the concept 'sustainability' but came up with personal interpretations that comprised the preservation of and respect for nature, thinking for the future as well as an emphasis on the social dimension within sustainability. In their definitions, societal categories also appeared that they seemed to have normalised. The belief was expressed that social connections are inherently important for achieving sustainability. Further thoughts were conveyed that showed the breaking down of global problems to local solutions and a belief in self-efficacy and human agency. Technological or political solutions rarely got mentioned. However, the collective identities appear not to be fundamentally different to dominant conceptions. Sustainable behaviour was occasionally perceived as not compatible with leading a comfortable life and well-being and associated with sacrifices.

6.3 Defining power relations

As collective identities emerge and exist within a system, they are not independent from influence and power relations. Taking a critical look at the participation and action in community gardens is therefore important. In general a homogeneity in the profiles of the respondents could be noticed. The majority was over 50 years old, well-educated and based on their professions part of the middle or upper-middle class. No large differences in socio-economic and ethnic background appeared during the data collection. While this may be due to the chosen methods and a limited reachability of respondents caused by the covid-19 outbreak, social inequality and exclusion can be the cause for little diversity among the community gardeners. In two of the gardens, despite many efforts on the side of the community gardeners to include and activate others to join, they do not encounter a lot of response. Earlier research points out that while opportunities for community garden development exist, the ability to take advantage of these opportunities is reliant on having knowledge and the material resources to get access and make institutional connections (Ghose & Pettygrove, 2014). Reviewing the conditions that the municipality Nijmegen sets for starting community gardens, it can be argued that not every citizen is in a state of fulfilling these. Notably, all four community gardens that were studied in context of this research are situated in areas where residents are in an above city average economical position. Therefore, differences in knowledge and material resources are likely to define the participation in community gardens. Also within the gardens, power differences were noticed. While everyone potentially has the same possibilities to participate, take influence and make decisions, differences in time and knowledge create authority, hierarchies and exclusion to a certain extent. Thereby, power relations do have influence in defining the collective identities of community gardeners.

6.4 Relations to societal transformation

Community gardens have been portrayed as transformative spaces before. As the connection between collective identities and their surroundings is reciprocal (Melucci, 1995), examining this relationship is valuable for evaluating the transformative capacity of these spaces. While community gardens change their spatial environment, this transformation is mostly seen positive and valued according to the respondents. Invitations for active involvement are not being often followed upon by outsiders, however, the community gardeners reported to get a lot of response during garden work from people that pass by the gardens. This contact is highly valued by the community gardeners. While the gardens

can serve as spaces by which people can experience, connect and observe, the gardeners regularly deliver explanations and information. By sharing harvest, organising parties and openly explaining what is growing, knowledge can be shared and might inspire and create awareness among food supply, biodiversity and consumption. Furthermore, as the community gardeners try to involve people and let them experience, new social connections develop enhancing the social cohesion in the neighbourhoods. Thereby, social alienation can be reduced and unwanted behaviour such as littering might even be prevented. Yet, the community gardeners also encounter problems such as damage, stealing and conflicts with neighbours which can disrupt their relationship to the outside. While the respondents often spoke of a little but meaningful effect of their practices, it was observable that their values would translate into the decisions they made and could thereby have influence on others. Although this influence might not be very large, the gardeners still provide opportunities for raising awareness and allow for more social-environmental and nature connectivity.

6.5 Final conclusion

Reviewing the four subquestions, we have seen that the collective identities of the community gardeners are on the one hand a positive example for creating more social-environmental connections and offer opportunities for experiencing nature in the city. They also allow for inspiration and education in topics such as biodiversity, food supply and consumption. As relatability and social connections can be especially important for inspiring others, when we remember Bashir et al.'s (2013) study mentioned in the introduction that proved people's stereotypes are critical for the adoption of pro-environmental behaviour, the community gardeners can open up dialogues over sustainability and raise awareness. On the other hand, the collective identities have also shown to be defined by inequality, exclusion and hierarchy. As they emerge among prevalent structures, their take on sustainability does not appear to remain uninfluenced from dominant culture perspectives. Yet, dissatisfaction and concerns with unsustainable practices and the belief in the importance of human agency could be clearly recognised. Like Crossan et al. (2016) stated, community gardening practices are not free of dominant cultural influence, but still can provide other subjectivities as well. Thinking back to Scoones et al.'s (2020) enabling approaches to societal transformation that empower people to act on their own behalf and Linnér and Wibeck's (2020) interventions that also focus on formulating new perspectives, values, knowledges and worldviews, I argue that the community gardeners' collective identities are connected to societal transformation in these ways and are indeed empowering, however, that they are also subject to larger societal inequality. Community gardens fulfil then only to a certain extent Pereira et al.'s (2018) definition of transformative spaces as they indeed experiment with new ideas and practices, yet, issues are not reframed in a way that enables the co-creation and co-realisation of solutions. Although not everyone is able to participate in the same way or at all, I want to emphasise that this is something that can be worked on. Like the scholars that have written about the potential of grassroots innovations, I also believe in the strength of collective action. As O'Brien (2018) already stated, collective agency and the recognition of the interconnectivity and potential of human agency to influence and catalyse systemic changes are necessary for societal transformation. The four community gardens in this thesis clearly increase the cohesion of their environments and establish new social connections. They seem like good starting points for making sustainability the norm guaranteed the exclusion of no one, because "everyone is part of a system, and everyone has a sphere of influence" (O'Brien, 2018, p.158).

7. Recommendations

Based on the conclusions, recommendations can be made for further scientific research, the local government and the community gardeners.

This thesis has shown opportunities for future scientific research. First of all, while this was a first attempt at using new social movement theories' concept 'collective identities' as a theoretical lens to analyse community action for societal transformation towards sustainability, this theoretical choice should be reflected on. While the concept allowed a deep engagement with community gardeners' perspectives and practices, it could also be useful to include other perspectives to evaluate their connection to societal transformation. For example, further research could examine visitors', neighbours' and the municipality's perspectives, how they are being influenced by the community gardeners' practices. As these perspectives stand on the other side, they can help evaluate community gardens' potential for catalysing societal transformation. Next to that, this research has suggested that in the case of the four gardens studied, power relations defined their identities. As every garden is situated in a well-off neighbourhood, it would be valuable to see whether there are also gardens with more diversity or in neighbourhoods where residents hold a lower economical position on average. A comparison would allow to assess the sufficiency of opportunities for participation and would give insights to what could be improved.

Regarding the municipality Nijmegen, a few suggestions can be made based on this research. Whereas it is advantageous for a local government when civil society actors maintain green spaces and also help to increase the social cohesion, citizens should not be overburdened with responsibilities. While the municipality already supports and facilitates these initiatives, some respondents mentioned that they needed more support and better communication as they sometimes seemed responsible in the eyes of the neighbours when certain decisions were made. If these initiatives are enhancing social cohesion, then it is important to make it easier on everyone to participate. Additionally, it should be reviewed whether the conditions for starting a community garden can be made easier for people with less knowledge and resources. One idea could be to connect the different community garden initiatives within Nijmegen so they can exchange ideas and help each other. The respondents often mentioned that the adoption of sustainable practices costs time that most people that work a full-time job cannot afford or are hindered by. One respondent came up with the idea that for sustainable and balancing activities like gardening, time could be included into working hours. Of course, for changes like these we need wider societal restructuring and acceptance of the non-immediate monetary value of wellbeing.

Regarding the organisation of the community gardens, recommendations can be made as well. While the community gardeners are doing important work creating spaces in the city where they themselves but also others can learn about food cultivation and biodiversity and connect, they should stay open and invite people even while facing troubles. It is important to not close off because coming off as a positive group can stimulate others to adopt similar behaviour. Also considering the conflicts that sometimes arose in the gardens and may lead to exclusion or even whole groups falling apart, it has proven to be important to talk about what the garden means to everyone individually and search for a common ground.

8. Reflection

In this chapter, I will critically reflect on this research, the process, the methodology and the outcomes.

When I began with developing the idea for this research, I was overwhelmed by the amount of literature on community gardens and grassroots initiatives. To review the literature and define my topic took me longer than I expected. While a lot of literature already spoke of transformative grassroots innovations and a connection between community gardens and social change, I felt that an engagement with the people's ideas and understandings of their practices missed to portray the gardens as transformative. During defining the research, the covid-19 outbreak caused me to overthink some choices and make arrangements. Because of the outbreak, meetings and collective gardening work days were not held and I was unable to do as many observations as initially planned. Originally, I had planned to visit every garden and introduce myself personally. I imagine I would have gotten more response and deeper understandings of the groups. Because I interviewed only a very small percentage of the gardeners at the Kiemtuin, De Vogelkers and the Limos garden, I also felt that it was difficult to still speak of 'collective' identities. The conclusions I got to draw could be very distorted by the small variety of gardeners I spoke. Would I have been able to observe gardeners during their work, I could have gotten very different impressions of their group dynamics. Another point concerning the respondents is that noticeably the majority is already around or above 50 years old. While some groups said they had difficulties attracting younger people, I cannot tell for every garden whether this was the case. Due to the covid-19 situation amongst other things, it could have been that I have missed out on younger voices that could have delivered different perspectives and insights. Also, as all the interviews were held in Dutch and this is not my first language, it could always be that I misunderstood something that was said, no matter how much I paid attention to this limitation. I tried as much as I could to not pose leading questions during the interviews, however during transcription, I noticed that this sometimes did not completely work out.

During conducting the fieldwork, I sometimes felt that while the concept of 'collective identities' enabled me to engage with the perspectives of the gardeners, it also disabled me to look at other perspectives that could have been very insightful to evaluate community gardens' outreach in society. So, despite the outcomes of this research might not be as insightful as they could have been, the results lay a foundation for future research to engage with people's perspectives in order to understand and guide societal transformation.

Additionally, I truly value the learning experience I had with this thesis and enjoyed the contact with the community gardeners especially in the times of social distancing. I learned a lot of things about conducting research and myself. During the writing phase, I noticed that my concentration is dependent on a lot of factors, some more decisive than others. Whereas the weather and no air conditioning can have a small influence, I learned that social interaction and the exchange with others are very important for gaining perspective and inspiration. The covid-19 outbreak made this very apparent to me and it now feels like a privilege to me to be able to go to the library to study or meet and discuss with my fellow students.

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