



# GREEN RENOVATION: SOCIO-ECOLOGICAL PRACTICES AND THE TRANSFORMATION OF URBAN LANDSCAPES



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# Green renovation: socio-ecological practices and the transformation of urban landscapes

in

# **Groningen and London**

"You can do things like this with space in the city ... it's not just all stones and buildings" Margo Slomp.

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## ABSTRACT

For generations green spaces have been part of the consideration in the planning of urban areas. This has traditionally been the responsibility of those that plan the city or that of individuals on their private property. This thesis looks beyond the traditional approach to incorporating green space in the urban landscape and rather looks at the transformation made possible by the socio-ecological practices of guerrilla gardening and urban gardening as well as why and how people get involved in urban greening in the cities of Groningen and London.

How do socio-ecological practices influence the transformation of urban landscapes? Why do people get involved in the first place? How does this link to planning policy and other outcomes? These are the central questions of this thesis and they are important to the governance of green space. As a start we explore green space and green space governance, psychological theories of behaviour that motivate involvement in socio-ecological practices and their relation to social innovations and place-making within the city as well as bottom-linked practices in governance. Using a qualitative research approach, through a series of interviews, observations and the review of relevant documents, I reveal that there are both links to theory as well as some misconceptions.

What clearly emerges is that socio-ecological practices can and do, in more ways than one, change the city. From greener neighbourhoods and greater social cohesion to place-keeping, empowerment and bottom-linked practices; physical, social and policy changes are apparent. Green space is only a part of the ever changing, organic entity which is the city and by exploring urban transformation through socio-ecological practices we can come to a better understanding of the urban dynamics significant to contemporary planning.

*Key terms: socio-ecological practices, urban transformation, green space, green space governance, social innovation, place-making, place-keeping, bottom-linked practices* 

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#### GLOSSARY

**Urban green space** – which is land that consists *predominantly* of unsealed, permeable, 'soft' surfaces such as soil, grass, shrubs and trees (Swanwick, et al., 2003). Areas within an urban frame (town/city) which are dedicated to natural or cultivated greenery, for instance, a park or garden. Other spaces can also be included in this definition such as sidewalk or balcony gardens as they also contribute to the overall "green appearance" of an urban area.

**Governance of green space** – the interactions and relationships between actors and institutions with an interest in and/or effect on the state of green spaces within the urban frame (Author, 2014).

**Socio-ecological practices** – these are a set of activities that are linked by cultural, social, institutional arrangements as well as by environmentalist interests and/or goals. The concepts of urban gardening, guerrilla gardening and urban agriculture all fall into the realm of socio-ecological practices and the term is used in this thesis as an umbrella reference to them (Author, 2014).

**Urban gardening** – growing plants of any type in an urban environment. This may be on one's own property – in the backyard, on a balcony, in a private lot or even indoors – or in a community property (Author, 2014). Community gardens, allotment gardening, container gardening, et cetera all fall under this umbrella term.

**Guerrilla gardening** – the act of planting on land not owned by oneself, often public land, without explicit permission to do so. In short, it is the illicit cultivation of someone else's land (Richard Reynolds, 2013). An individual doing this is a guerrilla gardener. Guerrilla gardening is technically a form of urban gardening but in the context of this thesis, guerrilla gardening is distinguished from urban gardening by the nature of the practice, the former being without permission and the latter with permission.

**Urban agriculture** – the cultivation and distribution of food within or in close proximity to urban areas (Bailkey and Nasr, 2000). May involve gardening for food or ornamental purposes (horticulture) but can also more broadly include animal husbandry, apiculture (bee-keeping), aquaculture and agroforestry.

**Tactical urbanism** – a type of urban planning model advocating urban interventions with a community-focus which are often small, inexpensive and temporary aimed at making a small part of a city more enjoyable, lively and liveable (Lydon, et al., 2012). Guerrilla gardening is an example of such an intervention.

**Place-making** – an approach to the planning, design and governance of public spaces that is people-centred and focused on the value of and attachment to a spot because it is pleasant or appealing (Martin, 2003; Project for Public Spaces, 2009).

**Bottom-linked practices** – a middle ground on the planning spectrum that allows for initiatives developed at the community level to meet with support and facilitation from higher levels (Jessop, et al., 2013; Pradel, García and Eizaguirre, 2013).

**Social innovation** – innovation in social relations covering the array of actions, mobilization-participation processes and outcomes of actions that lead to improvements in social relations, governance structures, collective empowerment and more (Moulaert, et al., 2013)

#### **CHAPTER 1: INTRODUCTION**

#### "I don't divide architecture, landscape and gardening; to me they are one." Luis Barragán, Architect.

I grew up in Nairobi, Kenya, a city somewhat tongue-in-cheek referred to as the Green City in the Sun. Even as a child, I recognized the incongruity, Nairobi in the 1990s had plenty of sun but not so much green. I always wondered why and at some point developed a fascination with gardening, growing vegetables and flowers in a small corner of my parent's front yard that remained typically untouched except for the occasional pruning of overgrown bushes. Many years later, I chose to pursue a bachelors degree in environmental management and after that a masters in environmental and infrastructure planning. Throughout this I never lost my fascination with gardening, and perhaps more importantly my interest in unused and underused urban spaces. Therein was the conception of the idea for this thesis, between a never-lost childhood hobby and the academic pursuit of knowledge.

What makes a city a city? What do we choose to do with the space that we encounter in a city? That is where the questions start. But perhaps more interesting is why we choose to do what we do and why we think it is the right thing to do. As a starting point, this chapter introduces the concept of green space in urban areas and explains the perceived importance of these spaces as well as approaches to their governance. In order to give a clearer picture of what this thesis intends to look at, an outline of the research question and sub questions of this study will further elaborate on its aims. Because the 'why' is an essential element of my investigation, I then draw links between urban green space and potential approaches to governance that may have, in some instances, been previously overlooked or undervalued. The purpose of this is to highlight the importance of research into socially innovative outlooks on urban green space governance from the perspective of socio-ecological practices.

#### 1.1 Finding a place for green space

The concept of green spaces in cities is not new, from as far back as Sir Ebenezer Howard's garden city movement; "Including greenery in human settlements is a tradition deeply rooted in antiquity" (Jim, 2004). However, often they are viewed as recreational or there for aesthetic purposes only (Jim and Chen, 2003). According to Selman (2010), landscape planning has traditionally been concerned with an agenda

of "protection, amenity and ornament". However, this is a very one-sided view of the value that green spaces lend to society. Socio-ecological practices, in this case, urban gardening/farming and guerrilla gardening seek not only to derive greater values from green spaces such as promoting ecosystem rejuvenation and producing food, they also seek to transform what would otherwise be wasted or underutilized spaces - what McClintock (2014) refers to as "vacant lots and other urban fallow" - within urban areas into productive zones.

The approaches may differ in that urban gardening follows a formal route of seeking permission for activities from higher authorities and guerrilla gardening is carried out – as a rule – without explicit permission (Adams and Hardman, 2013), but I believe it is important to note that there is a shared agenda and that urban gardening/farming as well as guerrilla gardening are two sides of the same coin, aiming towards sustainable urban areas and should thus be studied hand-in-hand. Together they are a force driving the transformation of the urban landscape with a mix of individual and collective community actions which have benefits beyond the parties actively involved on the ground. We must examine all this while keeping in mind not just sustainability and environmental rejuvenation but also equity, socio-environmental justice, rights to the city and social cohesion which are a part of these practices.

Nevertheless, this is not to say that these practices implicitly have these values (Born and Purcell, 2006), but that they are social innovations attempting to meet social needs where they perceive a gap (Mehmood and Parra, 2013). Not only do they serve the communities they are in but they may be representative of a broader shift in urban spatial planning and governance of urban spaces. According to Jansson and Lindgren (2012) "although user participation in landscape management is timeconsuming and expensive, it can improve work by managers toward ecologically and socially sustainable landscapes and processes." If indeed the aim of a more sustainable and green city, based on ecological rejuvenation (Henry Cisneros, 2010) and socio-economic equity, is the shared agenda of all parties, is there a higher (policy/institutional) level of support for and interaction with people producing social innovation? How do they influence each other if at all and is this an indication of future urban governance and planning?

#### **1.2 Research question**

The main aim of this research is to examine if and how socio-ecological practices in urban areas are influencing the direction of urban transformations on a social, economic, environmental and political level. Looking at not only how the practices transform the physical landscape but also the community and policy landscape in their areas of operation. Therefore main research question is:

# "How do contemporary socio-ecological practices, such as guerrilla gardening and urban gardening, transform the urban landscape and urban spatial planning policies and vice versa?"

In the process of reaching the main research goal, the research will aim to answer the following:

- Why do individuals/groups become involved in socio-ecological practices and what actions do they partake in?
- What are their ultimate goals or what do they hope to achieve in the short- and long-term?
- Are there tangible and/or intangible transformations as a result of socioecological practices in the short-, mid- and long-term?
- What network of support is received over the course of their projects and how do the local municipality contribute to their agenda? In other words, what are the roles of actors in the governance of the city?
- What role do socio-ecological practices play in spatial plan creation, evolution and/or implementation? Do actions link to policy or operate independent of policy?

It is important to note that these questions do not only aim at merely identifying the physical outcomes of socio-ecological practices, but rather to examine more holistically the motivations, visions and collective actions behind that.

#### **1.3 Potential challenges**

The challenges encountered by this study mostly revolved around identification of serious guerrilla gardeners willing to discuss their activities due to the legal grey area which their activities lie in. Apart from that, many guerrilla gardeners do not publicize their activities so making contact with the more elusive, long-time guerrilla gardeners was not possible. While there is an abundance of literature on urban agriculture and gardens, there is less so focusing solely on guerrilla gardening. Nevertheless, that is why this study is important to help bring to light some of the gaps in knowledge not just about the actors in socio-ecological practices, such as guerrilla gardeners, but also their motivations and goals, as well as the barely charted sphere of their of their interface with formal spatial planning within the context of governance of green space.

#### 1.4 Case studies: Groningen and London

At first glance, there does not seem to be much in common between Groningen and London. The former is the largest city in the North of the Netherlands with a population of 198,355 inhabitants (Statistics Netherlands, 2013) and the latter is the most populous municipality in the European Union with a population more than 40 times larger than Groningen (8,173,941 according to the 2011 census, Office of National Statistics). However, they are both modern cities with citizens who actively participate in socio-ecological practices and municipalities handling shifting strategies in green space governance.

I look at several gardening projects within Groningen and London for this thesis. In Groningen: The ORKZ which is a former hospital with a history of squatting, now a residential complex with gardens; Tuinwijck which is a garden complex made up of a series of private allotments; Hof van Reseda, a neighbourhood garden. In London: the Elephant and Castle which is a neighbourhood in Southwark Council, London with community gardening initiatives. Additionally, there are other smaller gardening initiatives pioneered by individuals and groups (sometimes in the form of guerrilla gardening) that I will discuss as well. With numerous projects spread out in Groningen, London and many other cities across the globe, one thing is clear: while there are a variety of values associated with green space, green space is a priority to citizens and cities.

#### 1.5 Coming up next

With an introduction to the topic, the questions I will try to answer and a glimpse at the cases under investigation, it is possible to form a vague picture of this research. In

the chapters to come I will continue to elucidate this picture with a theoretical framework and a discussion of the research methods used.

With the research question and sub questions in mind, the second chapter will delve into the theories that will serve as a framework. We will look at green space and green space governance in urban areas, followed by an exploration of the theories of behaviour (including goal framing theory, the theory of planned behaviour, the norm activation model, et cetera) that may serve as a base of motivations to get involved with socio ecological practices. Central to that discussion is what people do, why they do it and what they hope to achieve. The following chapter aims at not just getting a better understanding of, but also looking beyond the surface of contemporary socioecological practices – moving past outcomes and stereotypes of gardens and gardeners – and their role in modern society.

The third chapter is a discussion of the research design used in compiling this thesis. I used a qualitative approach with interviews, observation and document review being the main sources of data. Additionally, the practical and ethical issues taken into account during the research are touched upon. With the theoretical framework and research design in hand, the actual research was underway leading us to the discussion of findings in chapter four. This forms a series of reflections that combine the questions asked in this first chapter with the answers uncovered within literature, from interviews and during on the ground research. This of course leads to the conclusions that I have drawn, which are within chapter five, in addition to potential policy recommendations and an overall reflection on the entire thesis.

#### **CHAPTER 2: THEORY**

# "A man has made at least a start on discovering the meaning of human life when he plants shade trees under which he knows full well he will never sit." David Elton Trueblood, Author and Theologian.

The previous chapter has given us an introduction to the topic at hand. It is impractical to speculate on the answers to the questions presented without first examining what the literature says about the topics under investigation. This chapter examines theories and writings regarding urban green space, socio-ecological practices and governance of green space. It looks at these individually as well in the broader sphere of urban planning ideologies. It starts with an exploration of the meaning of green space and green space governance then moves on to dilemmas in green space governance, the motivations behind participation in socio-ecological practices and eventually, their link to place-making.

#### 2.1 Germinating green space governance

Much has been written about urban green space and urban green space governance (Caspersen, Konijnendijk and Olafsson, 2006; Chiesura, 2004; Jim and Chen, 2003; Li, et al., 2005; Solecki and Welch, 1995; Thompson, 2002, et cetera). In order to understand why it is relevant to explore the governance of urban green space it is important to understand what urban green space actually is and perhaps even more importantly, what urban green space can potentially be. As Ralph Waldo Emerson, the 19<sup>th</sup> century Transcendentalist, once said "What is a weed? A plant whose virtues have never been discovered."

Urban green space is those areas within an urban frame (town/city) which either are dedicated to natural or cultivated greenery, for instance, a park or garden. However, other spaces can also be included in this definition such as sidewalk or balcony gardens as they also contribute to the overall "green appearance" of an urban area and this thesis considers all of these levels. Including these smaller and sometimes unconventional spots of greenery also opens the door to the inclusion of potential green spaces, spots with no greenery at all but which – through an innovative approach – can potentially grow plants, for instance rooftop gardens and even artistic eco-art projects such as green moss graffiti. It is impossible to think of urban green space without looking at the setting, which is the city as a whole.

Now that we have an idea of what is meant by the term urban green spaces we can look at how these spaces are governed, by whom and what this form of governance means for the landscape of an urban area. While examining the definition of governance Jansson and Lindgren (2012, p140) state that it "can be aimed at dealing with (or controlling) either things or people. This is an important distinction, as management in relation to urban landscapes can focus either on the space or the people: mainly those involved within the management organizations."

Jordan (2008) acknowledges that governance as a term is open to multiple interpretations and can refer to numerous concepts that in practice are different things. For the purposes of this thesis, governance is the interactions between various actors that can contribute to the process of societal steering (Lemos and Agrawal, 2006). It acts as an umbrella term that covers the entire array of institutions and relationships that take part in the process of governing (Pierre and Peters, 2000); in short, governance is a base embedding other processes, such as decision-making and collective actions. It is important to note the shift from the technical (central control) to communicative rationale in planning which reflects the integrative and collaborative essence of good governance, not just the management of space or of people but the governance of both as they relate to each other. As such, governance is a relational concept and relies on the interactions between actors, referred to by Sywngedouw (2005) as "socially innovative institutional or quasi-institutional arrangements" that have the power to make and implement decisions.

With an understanding of urban green space and governance, we must now go beyond these basic concepts and explore the role of social innovations and practices among stakeholders and how this reflects back on governance (the relation between governance and social innovation) of urban green spaces. How these spaces are perceived and whose responsibility it is to create and/or maintain them are important factors to consider. Are urban green spaces merely a small respite from the concrete jungle environment (Kaltenborn and Bjerke, 2002; Thompson, 2002)? Are they part of the fabric of society – acting as mediums of social interaction and improved quality of life ( Caspersen, Konijnendijk and Olafsson, 2006; Chiesura, 2004; Dempsey and Burton, 2012)? Are they a small step towards increasing the agricultural productivity of urban areas (McClintock, 2010)? Are they a front on the battle to reclaim and promote ecological diversity in urban areas (Bolund and Hunhammar, 1999; Crane and Kinzig, 2005; Swenson and Franklin, 2000)? Well, urban green spaces may be all of these things. It is purely a matter of perspective and intent which lead to both intended and *unintended* outcomes. For instance, is the conversion of an untended lot into a vibrant garden merely indicative of a greening of physical space or is it also a driver towards "greening" of policies.

Green space is, historically and socially, embedded in the cityscape. Urban planners have for the most part always included urban green spaces within city plans, after all parks and gardens look good and are a break from the monotony of an entirely concrete environment. However, is this aesthetic approach to urban green spaces the best or only option to go about it? Perhaps in looking at the overall planned picture of a city or town, we overlook the smaller, unconventional spaces that may have potential. Therefore, with this perspective, it is not the responsibility of the municipal authorities or city planners to handle the governance of smaller or peripheral green space because this space does not fall into the "big picture" of the city plan. Additionally, we do not always view green space as having a higher potential beyond aesthetic value. It is here that the perspectives of individuals, small groups, or local communities become relevant because they look at the much smaller level – a bare patch of soil in the neighbourhood, for instance. Therefore, the governance of green space in this context is more of a social issue than a matter of natural science and should be approached as such (Jansson and Lindgren, 2012).

We can thus take green space governance to be the interactions and relationships between actors with an interest in and/or effect on the state of green spaces within the urban frame. It is from this perspective – the individual or community – that socio-ecological practices such as urban gardening and guerrilla gardening emerge. They are the social underpinnings of green space so to speak. While it is most natural to invest in our own personal green space in our backyards or on our balconies, it can be said that wanting to govern urban green space is a manifestation of our right to the city (Harvey, 2008) driven by a desire to influence and transform the urban landscape that we claim as our own such as in the case of tactical urbanism (Lydon, et al., 2012). However, it is not always as straightforward as that because having rights does not equate with having permission. There are, in most cases, procedures to be followed and permissions to be obtained and these follow the course of a city plan for the governance of green space within its jurisdiction. This of course may present a dilemma.

#### 2.2 Unearthing dilemmas

There is limited literature on the issue of dilemmas but the importance of this to socio-ecological activists was highlighted by Richard Reynolds during his presentation at the Energize Festival in Groningen in November 2013. If all parties are in agreement about the positive aspects of green space in urban areas, then what is the crux of the problem? The dilemmas emerge in the governance of urban green space from the different perspectives that are or can be taken by the stakeholders involved. In regards to the governance of green space from a relational perspective, Healey (1998) discusses the importance of "a rich social infrastructure of positive relationships" (p1540) that can protect collaborative efforts from taking an adversarial turn.

From an individual or community standpoint, the desire to cultivate and actions taken forthwith can be expressed in a series of statements: I want to grow things and a) I have permission to cultivate and pursue my interests in a designated area (most types of urban gardening); b) I am trying to get permission to cultivate in a particular area; c) I will cultivate wherever, with or without permission (guerrilla gardening). On the other hand, there is often not a single, unified view within and between municipalities. Municipalities' perspectives often fall within the range of possibilities from being very negative about citizen involvement in urban green space governance to positively embracing urban environmental movements as illustrated in Figure 1 below.



Figure 1. Municipality support for citizen involvement in urban green space governance (Source: Author)

Perhaps this is oversimplifying the issue at hand but it helps us to see where, unless there is consensus, conflict can arise. The approach to governance of urban green space is therefore multifaceted bringing out issues not only of rights (to the city), but also of obligations (of a municipality and its citizens), capacity (in terms of resources), priorities, agendas and goals. The issue goes beyond planting or not planting, it is important to consider not only how, but perhaps more importantly why. A large amount of literature on this topic emphasises the outcomes of urban gardening, urban green spaces, green space governance and socio-ecological practices as a whole (De Ridder et al., 2004; Jim and Chen, 2003; Colding and Barthel, 2013, et cetera). Additionally, we should emphasise the motivations leading up to rather than the outcomes or outputs of urban green spaces, because only in understanding the motivations can we then clearly assess the outcomes. As mentioned before, if all parties are in agreement about the positive aspects (outcomes) of urban green spaces, the crux of the problem potentially lies in the why and how to govern these spaces. It is the how and the why of urban green space governance that inspires individuals and communities to come together as a force to change their environment.

Another issue of note, that also is a dilemma of sorts, is the limited amount of literature that focuses exclusively on guerrilla gardening. There is a vast amount of literature on urban gardening and agriculture, but significantly less so on guerrilla gardening. Guerrilla gardening is often introduced to the public though news media. As mentioned in the previous chapter, it is a challenge to find genuine, long-term guerrilla gardeners and this lack of exposure in literature and in practice leaves their activities open to misconceptions which in turn colour the conclusions that society draws on why and how they interact with urban green spaces.

#### 2.3 Prompting planting: potential motivations and outcomes

The motivations which drive individuals or groups to take part in socio-ecological practices are essential to understand because the 'why' may be a good indicator of the devotion that is necessary to a long-term governance strategy. It may also be indicative of the trends in socio-ecological practices that are attributable to the individuals who are involved. These also have a connection to the dilemmas broached in the previous section as well as challenges faced during the study.

What prompts an individual to garden or partake in any activity for that matter? I posit that there are two often interlinked reasons: who they are (personality type, leadership) and what they expect to get out of it (outcomes) which together forms the

motivation to get involved. Using these as a base to link back to environmental psychology theories of behaviour (such as Ajzen, 1985; Kruglanski and Köpetz, 2009; Schwartz, 1977) that attempt to forecast or demonstrate indicators of (pro-) environmental behaviour such as that exhibited by individuals and/or groups involved in socio-ecological practices.<sup>1</sup>

#### **2.3.1 Goal Framing Theory**

Goal framing theory (Kruglanski and Köpetz, 2009) posits that certain overarching goals form the base of an individual's behaviour. These goals are: normative (related to complying with societal rules/expectations); gain (driven by an urge to improve/maintain one's resources); hedonic (to feel as good as possible in the moment). From these perspectives, we can deduce that an individual driven by hedonic goals would partake in socio-ecological practices if they made them feel good, perhaps from showing others that they have a green lifestyle. In the same vein and individual pushed by normative goals will participate if they wish to, or feel pressured to, go along with what their peers or community expect; if the rule is to contribute to a community garden or maintain their own front yard, then they will do so. A gain goal driven individual will take part in these activities if they offer what they consider to be resource benefits, for example free food from a neighbourhood orchard or money from the sale of vegetables they have grown or helped to grow.

However, it is important to note that goals will only contribute to leading behaviour if they are triggered/activated by cues in the environment (Kruglanski and Köpetz, 2009). For example, seeing neighbours work on their front yards encouraging an individual to do the same (activating normative goals), or walking past a garden in bloom and appreciating the beauty and smell (activating hedonic goals) giving someone the urge to contribute. We can therefore deduce that collective action towards pro-environmental behaviour can be encouraged by cues strengthening normative goals in a community.

#### 2.3.2 Theory of Planned Behaviour

The theory of planned behaviour (Ajzen, 1985) assumes that individuals make decisions based on their intention to engage in specific behaviour. That is, the more

<sup>&</sup>lt;sup>1</sup> It is important to note that these theories were initially developed to cover a wide range of proenvironmental behaviour and not gardening in specific, but that I have adapted them to reflect the theme of this thesis.

you intend to do something, the more effort you will put towards that end and the more likely you are to actually do it. The theory further goes on to say that intention is governed by attitudes (how much you think the behaviour is good or bad), subjective norms (how much you believe others would approve or disapprove of the behaviour) and perceived behaviour control (how much you perceive the possibility to perform the behaviour) (Steg, et al., 2012).

Applying this theory to socio-ecological practices, we can say that if an individual or group has a positive attitude towards socio-ecological practices, the belief that others would approve and know that it is possible to perform these practices then this would result in a high intention to take part in socio-ecological practices. The theory of planned behaviour has done well giving an explanation for a range of (pro-) environmental behaviours (Bamberg and Schmidt, 2003; Harland, et al., 1999). It is important to note that performance of certain socio-ecological practices, such as guerrilla gardening, goes against subjective norms because they are not entirely legal and thus not "approved" of. Therefore, guerrilla gardening as a practice presents a conflict between the desire to improve a piece of public space (something that should be approved of) and illegal actions (something that is disapproved of).

Additionally, the concept of perceived behaviour control is very relevant because often the difference between engaging in pro-environmental behaviour and doing nothing is the idea of whether or not action is possible. The following section on the Norm Activation Model (Schwartz, 1977; Schwartz and Howard, 1981; Steg and De Groot, 2010) explores this further.

#### 2.3.3 Norm Activation Model

The norm activation model (Schwartz, 1977; Schwartz and Howard, 1981; Steg and De Groot, 2010) proposes that "pro-environmental actions follow from the activation of personal norms, reflecting feelings of moral obligation to perform or refrain from specific actions" (Steg, et al., 2012, p189). Four principal variables are responsible for the activation of personal norms, namely: problem awareness; ascription of responsibility (feeling responsible for the outcomes not acting pro-environmentally); identification of actions to reduce environmental problems (outcome efficacy); and recognition of own ability to provide relief to environmental threats (self-efficacy) (Steg, et al., 2012).

Perceived behaviour control in the theory of planned behaviour (Ajzen, 1985) is in some ways similar to self-efficacy in the norm activation model because they both focus on the individual's belief in their power to act in a particular way. Whereas, problem awareness and ascription of responsibility can be related to the recognition of and taking ownership of responsibility of the state of one's environment which in the context of this study is the urban area.

#### 2.3.4 Symbolic and Affective Motives

While understanding the behavioural theories behind individual's actions is important in understanding why they will or will not take part in socio-ecological activism there are also other related motives that can inspire pro-environmental behaviour in individuals. Symbolic motives in the form of self-identity (the description an individual gives of themselves), for instance, are an important element. According to Steg, et al. (2012, p170) "a distinction is often made between personal (reflecting unique personal characteristics) and social identity (reflecting group membership)." Identities can either block or enhance pro-environmental behaviour (Steg, et al., 2012). For instance, the concept of gardening as a fad will encourage individuals affiliated with a group to take part in pro-environmental behaviour as long as it is the current trend because at that period of time it will be a reflection of their social identity. Additionally, there is a positive relationship between pro-environmental behaviour and environmental identity which is the extent to which people identify with environmentalism being a central tenet of their personality (Steg, et al., 2012).

Affect (feelings/emotions) also has a link to environmental actions. Some environmental behaviour is "worth engaging in because of the personal, internal contentment that engaging in these behaviours provides" (De Young, 2000, p515). So engaging in socio ecological practices may simply be the result of deriving pleasure from them or expecting to derive pleasure from them (anticipated affect).

#### 2.3.5 Theory of the meaning of material possessions

As seen in the previous section on symbolic and affective motives, we can draw a link between self-identity, affect and pro-environmental behaviour such as gardening. On the other hand, not only do individuals act on gardens, gardens can also act on individuals. The theory of the meaning of material possessions (Dittmar, 1992; Dittmar, 2004) puts forth that material goods can fulfil certain instrumental, affective and symbolic functions to individuals. I posit that this theory resonates with regards to gardens (which represent the material possession in question). Instrumental functions for instance, reflect the functional properties of an object (what it can be used for), in the case of a garden, producing food for instance. Gardening activities can therefore be the result of the need of this function to be fulfilled, for example in a food dessert where there is a distinct lack of access to fresh produce and a community garden is used to fulfil this function within a community.

Additionally, gardening can be a reflection of community values or personal qualities and as such can also fulfil symbolic functions. For example, cities all over the globe strive for the title of the World's Greenest City so the abundance of gardening activities among citizens ties to achieving this symbolic affirmation. Dittmar (1992) distinguishes self-expressive and categorical functions, with categorical functions used to communicate group membership status (for instance, members of an environmental organization taking active part in greening their neighbourhood) and self-expressive functions being a reflection of a person's unique qualities or values (for instance, a guerrilla gardener choosing to plant as a form of protest to a city's neglect of an area).

Both instrumental and symbolic functions connect to affective functions which reflect the feelings generated by an object (a garden) or activity (gardening). In short, feelings of joy, serenity, excitement or pride elicited by gardens and gardening fulfil needs within an individual or community. For example, improving the aesthetics of a neighbourhood by cultivating green spaces can bring a sense of pride to inhabitants of the community. As such, functions fulfilled by and motives for engaging in proenvironmental behaviours, such as urban and guerrilla gardening, can be seen as intimately and inherently linked.

# **2.6 Planting places: bottom-linked practices and place-making/place-keeping**

As we have seen in the previous sections, there are many motivations to engage in socio-ecological practices, but to what do these all ultimately lead? The attachment of value to a space in the course of gardening leads to its existential transformation from a space to a place. Therefore, place-making is the integral core of socio-ecological practices, as individuals and/or groups add significance and meaning to what was

previously urban fallow. This in turn may lead to the manifestation of urban transformation in different ways, namely: physical, social and within the policy arena.

Place-making is an approach to the planning, design and governance of public spaces that is people-centred and focused on the value of, and attachment to a spot because it is pleasant or appealing (Martin, 2003; Project for Public Spaces, 2009). A place is distinct from a generic space by the attachment of value to it, in short a place has certain (good) qualities (Dempsey and Burton, 2012) and place-making has in the past taken the form of imbuing spaces with quality. Still, the concept of quality is a debateable one, with different people having different definitions of what quality means to them based on their individual value systems.

In the previous section, I discussed the links between behavioural theories and proenvironmental behaviour. Many of these theories find grounding in the things that people value and which drive them. How they define a place links back to these theories. For instance, those with a strong pro-environmental identity will attach a high value to green space and work towards improving these spaces. It is also important to note the growing disconnection between urban inhabitants and nature (Bendt, et al., 2013) which begs the question of whether future generations will feel the need to embrace or foster these connections if they grow up without them. Placemaking will therefore require not just the recognition of the value of green space but also the building of affect towards green space.

Place-making is a collaborative activity that is in the hands of several actors. But whose hands should it be in? It is here that bottom-linked practices (Jessop, et al., 2013; Pradel, García and Eizaguirre, 2013) in planning are essential not just for place-making but also place-keeping which relates to what happens after high quality places have been created (Dempsey and Burton, 2012). In short, place-keeping is the long-term governance of places which in the context of this thesis is the governance of green space. How can we create these places and, imperatively, how can we maintain them over the course of years to come? Tactical urbanism, for instance, takes on change as a temporary thing, acting to improve a place through actions that have no intention of being permanent (Lydon, et al., 2012). However, if there is greater impact beyond just the physical change then is it also place-keeping? It is important to understand how places can and are made and kept. Individuals and

communities can at times lack the capacity or resources to take on extensive socioecological practices and municipalities on their own need to engender the interest and compliance of communities for successful long-term collaborative processes.

Bottom-linked practices allow for bottom-up experiences and actions developed at the community level with support from the top-down in terms of policy making and other forms of support and facilitation. In the words of Jessop, et al. (2013) bottomlinked practices recognize "the centrality of initiatives taken by those immediately concerned" as well as the need for "institutions that would enable, gear or sustain such initiatives" (p 115). This is the middle ground between top-down and bottom-up planning and governance. This allows for the competences of various stakeholders to be utilized (playing to strengths) towards the common good (Pradel, García and Eizaguirre, 2013).

#### 2.7 Social innovation: the common thread

The term and concept of social innovation has emerged several times so far in this thesis. Why is this important? Social innovation as defined by Moulaert et al. (2013, p2) is "innovation in social relations" with the features of need satisfaction, reconfiguration of social relations and empowerment. This has a clear reflection in several of the issues discussed so far in terms of the theories of behaviour that motivate socio-ecological practices as well as the bottom-linked practices as an approach to governing socio-ecological practices. As means of attempting to meet social needs where they see a gap (Mehmood and Parra, 2013), socio-ecological practices can be seen as an example of social innovation, as can bottom-linked practices.

Moulaert et al. (2013) also propose that social innovation be viewed as "a general, shared 'consciousness' about the nature of problems that modern societies face and the ways that they should be confronted." This somewhat parallels the norm activation model (Schwartz, 1977; Schwartz and Howard, 1981; Steg and De Groot, 2010) with its four variables of problem awareness, ascription of responsibility, outcome efficacy and self-efficacy. The former two variables connect to consciousness of problems whereas the latter two connect to actions (ways of dealing with problems).

It is important to note that social innovation does not only spring forth from needs but can also emerge from conflict (Moulaert, MacCallum and Hillier, 2013). In many cases, this conflict is over needs that are unsatisfied and socially innovative practices can act as "revealers" of needs. For example, lack of access to fresh produce in food deserts can lead to innovative urban gardening projects while the planting of unwanted species can lead to guerrilla gardening actions to remedy the situation. In the former case, gardening meets a need while in the latter case there is protest over a conflict of interests. This brings up the idea of justice and equity in the city as well. Not all places are created equal, in fact while urban areas continuously expand, low income neighbourhoods tend to have less access to green space (Sherer, 2003; Heynen, Perkins and Roy, 2006; Pedlowski, et al., 2003; Pham, et al., 2012). The disparity in quality of life that is created by inequitable distribution of the green space and the benefits thereof must be addressed. In such instances, social innovations can serve as a step towards bridging this inequitable state of affairs. Low (2013) discusses the importance of three aspects of socio-environmental justice: distributive (in terms of allocation), procedural (regarding integrated planning and decision-making) and interactional (in regards to interpersonal relations). Socio-ecological practices can potentially contribute to a better allocation of urban green spaces while improving social cohesion and streamlining integration through bottom-linking planning and decision-making.

Socio-ecological practices involve innovation in social relations and governance relations in terms of shifts in coordination, regulatory and power relationships (Lévesque, 2013). This is through the fact that individuals involved in socio-ecological practices are fulfilling roles formerly in the hands of other actors in society, for example, growing your own vegetables in lieu of buying them from the grocers or maintaining a neglected lot instead of waiting for public services to do it. This recognition of one's own ability to fulfil a role previously not thought of can be empowering (increased self-efficacy). In this way, bottom-linked practices are a social innovation of governance because they involve the recognition that actors involved in socio-ecological practices are capable of playing roles other than the ones traditionally assigned to them. By this, I mean that the role of authorities is not controlling everything and the role of the citizen can be so much more than passive acceptance of the status quo. Instead, change comes about through collective actions organized from the bottom-up while facilitation and support comes from the top. Thus, the onus shifts more towards communities to define their own fates and the authorities facilitate instead of initiate. It is important to note that social innovation can originate from multiple sources including innovative authorities and not exclusively from the bottom-up.

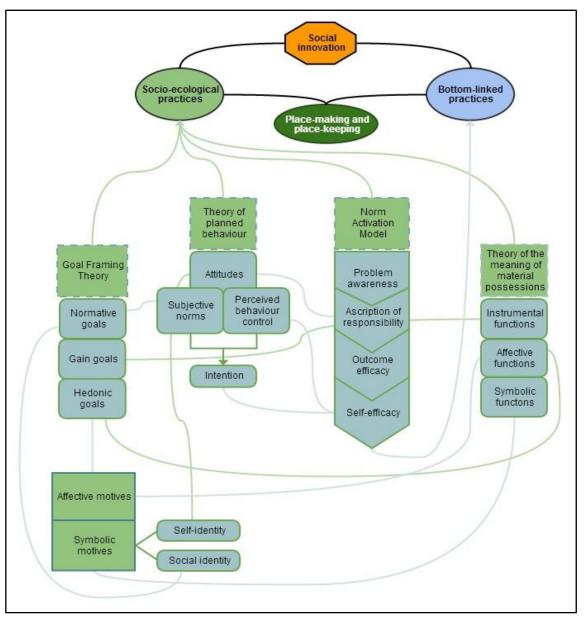


Figure 2. Links between facets of behavioural theory, social innovation and place-making/place-keeping (Source: Author)

In figure 2, I highlight some of the connections between the individual aspects of behavioural theory and social innovation. While all the behavioural theories may explain why individuals get involved with socio-ecological practices, we see also that behavioural theory links to bottom-linked practices as well. In order to meet on the middle-ground between bottom-up and top-down, there needs to be a recognition

that the status quo needs to shift and an individual or community can make steps to exploit their own abilities and take action, whilst an enabling authority can play the essential role of fostering this. This empowerment, which is a tenet of social innovation, is the fulfilment of self-efficacy and an essential part of bottom-linked practices. In turn, socio-ecological practices and bottom-linked practices – as well as the behaviour that underlies them – come together not only with initiatives that make places, but also the governance that keeps them. This relates to the emergence of relationships surrounding the shaping and care of green spaces that recognizes the shared responsibility of citizens and city authorities to make appropriate decisions not just for spaces but also for the people who interact with and give meaning to them. Place-keeping takes into account that places are not inert, rather they are a vibrant spatial and temporal reflection of the people and values that govern them.

#### 2.8 How it comes together

As shown Figure 3, there are connections between all the elements of theory. It is important to appreciate the value of these connections. Certain motivations guide the actors involved, in this case the gardeners and the municipal authorities. These motivations we discussed in the previous sections, highlighting the associations between psychological theories of behaviour and involvement with proenvironmental behaviour (socio-ecological practices).

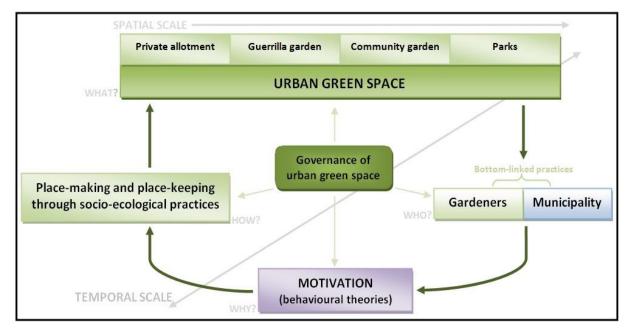


Figure 3. Theoretical framework (Source: Author)

The decisions made to be involved with socio-ecological practices in whatever form or capacity in turn influences the nature of governance of urban green space and contributes to place-making and place-keeping within the urban landscape.

It follows that socio-ecological practices are a key component of governance of the city and that they influence green spaces on different scales within the city. The rights to the city of citizens and the sharing of competencies and capacities between the authorities and citizens through bottom-linked practices will be evident in different ways and not just on several spatial scales, from private gardens to city parks and perhaps even on larger spatial scales, but also across temporal scales as time is an important factor.

Changes in green space are not only visible through the different seasons of the year but also long-term as urban areas grow, evolve and transform. Time is essential for social innovations to develop, for instance. Though not included in the illustration due to the primary focus on individuals and the city, jurisdictional scale is also a part of the overall scheme as changes in policy and urban greening trends are possible locally, regionally, nationally and even globally. These can also act as influences that have impacts and transform people and places far-removed from each other. It is important to note that the elements and relationships illustrated are not linear but interact with and influence each other (and other independent factors) within the complex arena that is the city.

#### **CHAPTER 3: RESEARCH DESIGN**

# "A garden requires patient labour and attention. Plants do not grow merely to satisfy ambitions or to fulfil good intentions. They thrive because someone expended effort on them." Liberty Hyde Bailey, Horticulturalist and Botanist.

With a good grounding in theory, it was necessary to actually get into the process of finding answers that were not apparent in writing. In order to do this in the best way possible, it was necessary to put together a plan of sorts and this chapter is the product of that. It looks at the various methods through which I carried out the research. It also explains why I selected the chosen methods and how I applied them towards data collection that is relevant to the study. The chapter highlights the sources of data, the proposed methods of extraction of this data, as well as the products from the data extraction. Additionally it provides illustration of the overall research design strategy. This chapter acts as a bridge between the first half of the thesis, which focuses on questions and theories already explored, and the second half of the thesis, which focuses on the findings of this research and their relevance now and in the future.

#### 3.1 Starting at the source

This thesis followed a qualitative approach to data collection. A quantitative approach would be appropriate perhaps to measure the outcomes of socio-ecological gardens such as the amount of green space in a city or the number of gardens in a city. However, since understanding the 'why' is a central question in this research, I chose a qualitative approach. As a large portion of the research dealt with the perceptions of urban green spaces and how best to govern them, actors/stakeholders involved with and affected by socio-ecological practices were a good source of primary data. This included organizers, participants, and residents in the area as well as local municipality planners.

Other sources of data were documents related to urban green space planning sourced from the municipality (policy documents) as well as existing academic and professional literature on the topics socio-ecological practices, urban green space and urban green space planning and governance. Additional sources of data that were used included observation of everyday reality, media coverage (articles, news segments and such) on pertinent issues and the internet since many activities are organized and/or publicised through this medium. A full list of sources can be found in the appendices at the end of the thesis.

#### 3.2 Harvesting data: methods/tools and their products

In regard to primary sources of data (citizens, activists, planning practitioners, et cetera) interviews were the main method of data collection. The interviews followed a semi-structured format, some with an in-depth focus (for those individuals with an expertise on an area pertinent to the study such as planning practitioners). While methods such as questionnaires and structured interviews were alternatives, I chose the semi-structured interview format. The reason for choosing a semi-structured with an interview guide format was to have a base of topics/questions which I needed to cover while allowing flexibility for the interview to adapt to any new ideas that came to light while speaking to the interviewee. I created the interview guide (see Appendix 3) as a single form with the research questions divided into themes. Included were general questions for asking across the board and also specific questions for particular interviewees. This allowed for the reflection of a variety of viewpoints and/or backgrounds. So while there was a single interview guide, the questions to all the participants were not identical, but they covered the same themes and allowed for a broad comparison between them. The product of this was voice recordings and transcripts from the interviews as well as notes in some cases.

Additionally, I used observation on the chosen case studies on urban gardening and guerrilla gardening. This was to observe participants in the field and get a better grasp of their activities. The products from the observation included pictures and notes taken in the field. It is important to not that there are several levels to observe (research units); firstly, observing the individuals involved, secondly, the gardens themselves and lastly, the city as a whole. It was important for this study to observe all of these three levels as transformations are visible across multiple spatial and temporal scales.

Ultimately, there was a document review of existing spatial plans of the municipality related to urban green spaces, as well as academic literature and media coverage related to the trend of environmental practices in urban areas and urban green space development and governance. I choose this method in order to seek out overarching connections or gaps that may exist in and between writings on socio-ecological practices and urban green space governance and to provide a base of theory for this study. The products from document review included notes, print outs and written summaries.

#### 3.3 Strategy

Below is an illustration of the basic research strategy for this study. The starting point is the research question which informed the documents to be analysed (as detailed in the previous section), the interview guide for the semi-structured interviews and the field observations. The resultant products of document analysis fed back into the interviews (theories, pertinent data) and also the products of the field observations informed the interviewing whenever new views or data not previously accounted for were unearthed.

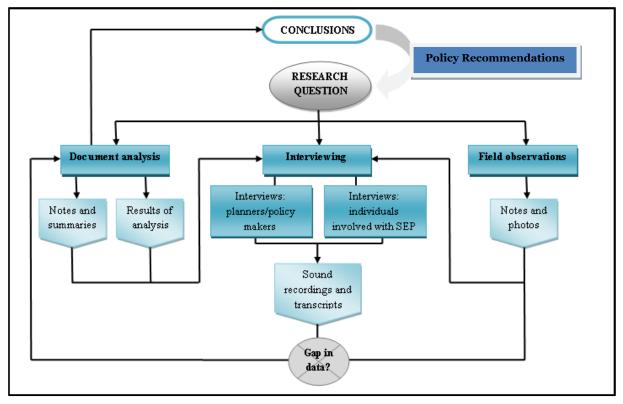


Figure 4. Research strategy (Source: Author)

Additionally the products of the interviewing process (as well as field observation) reflected back on the documents that were analysed especially when I identified a gap in the knowledge. All the data from this was then analysed and presented as a whole

(chapter four of this thesis) in order to draw conclusions for the study, which led to the formulation of policy recommendations which in turn may lead to further areas to research and a new research cycle.

#### 3.4 Ethical issues

Due to the nature of this study a significant portion of the research involved interaction with individuals in the form of interviews as well as during observation. Principles of ethics are considered to apply to all forms of research involving humans (Vanclay, Baines, and Taylor, 2013), such as the data collection that was conducted during this study. Therefore, there are several ethical issues that guided these interactions. First of all regarding consent, not only was participants' consent sought for the interactions, I also sought it for making recordings of the interviews. Secondly, interviewees had the right to withdraw from the study at any point as well as the option to remain anonymous. Thirdly, there was full disclosure of the intent of the study to use information they provided, in order help inform their decision to participate and whether to remain anonymous. Lastly, recording/transcripts of the interviews were available if requested. To facilitate all the above, I created a consent form (see Appendix 4) which detailed all of the above issues. The list of interviewees and interview dates is available in Appendix 2.

Finally, it is important to note that the research for this thesis is within the urban context and therefore subject to the complex dynamics and relationships within which all actors are involved in a direct or indirect way. As mentioned previously, there are three main research units: the individuals involved, the gardens and the city as a whole. While the cases that I have looked at are within Groningen and London, this is in essence not a comparison of the two cities but an examination of socioecological practices and the people involved with them with the aim of revealing potential ways to plan urban green space and its governance. The subsequent chapter covers the findings that have resulted from this research strategy and the link they have to the theories discussed in the previous chapter. The final chapter draws conclusions and makes recommendations based on these findings as well as offering reflections on the research.

#### **CHAPTER 4: FINDINGS**

"The single greatest lesson the garden teaches is that our relationship to the planet need not be zero-sum, and that as long as the sun still shines and people still can plan and plant, think and do, we can, if we bother to try, find ways to provide for ourselves without diminishing the world." Michael Pollan, Author, Journalist and Activist.

The chapters up to this point have covered the introduction to the topic, theories I have used and the research design. In the first chapter, I raised several questions and thus far we have charted the route to obtaining the answers. This chapter presents the data collected in the course of the study. While putting them forth in a coherent manner, it is also crucial to reflect on the relevance of the findings to the research question and sub-questions, in addition to how they reflect on and link to the theories explored in chapter two. Taking everything into account, this chapter provides an image of the status quo as a reflection of the assimilation of all of the data gathered in the course of this research.

#### 4.1 Sprouting and taking root

As a start to discussing the various findings, we ought to have a glimpse of the various gardens in which have served as a setting for this research. All of these projects represent the dedication and concerted efforts of the people involved in socioecological practices. The ORKZ Tuin is a garden located on the grounds of a former hospital which is now a residential complex. The main part of the garden is in the courtyard which was formerly the hospital garden. Adjacent to this is a formerly unused parking lot which is currently in use as a guerrilla garden by the residents who saw the potential to use it to grow vegetables in raised beds which they have mostly built from salvaged wood. Also on the property are behives and there are plans to build a greenhouse sometime in the future.

The Mobile Gardener's Park is located on a lot on Wansey Street. Formerly a redevelopment site, this space has now been transformed into a garden oasis in the neighbourhood. This community initiative contains a collection of raised beds in addition to a meadow. The community often uses this space for different social gatherings. Membership is offered to local residents for free for container gardening. The Elephant and Castle Roundabout is located in the neighbourhood of the same name. After years of disregard, local gardeners acted on the space in 2007 to improve its appearance through guerrilla gardening. Proposed changes to the roundabout to widen the road currently threaten their work.

Garden	Type of garden	Est.	Location
ORKZ Tuin	Community/ guerrilla	2012	Emmastraat, Groningen
The Mobile Gardener's Park	Community	2011	Wansey Street, London
The Elephant and Castle Roundabout	Guerrilla	2007	The Elephant and Castle Roundabout, Southwark, London
Hof van Reseda	Community	2010	Resedastraat, Groningen
Tuinwijck	Allotment garden complex	1913 (original location); 1963 (current location)	Helperzoom, Groningen
Da Costahof	Residential <sup>2</sup>	2012	Da Costastraat, Groningen
Buurtmoestuin de Velden Oo(g)st	Community	2014	Piet Fransenlaan, Groningen

#### Table 1. List of gardens (Source: Author)

Hof van Reseda is a community garden started by the residents of a block of houses on Resedastraat in Groningen. Their collective efforts see annual additions to the garden which currently includes raised beds built with recycled hard wood, a chicken coop, insect hotels and a greenhouse.

Tuinwijck is a century old allotment gardening complex that also contains a central public space often used for social gatherings. Citizens privately own individual allotments. Also on the property is a wild garden designed by artist Jan van der Til and a pond. Da Costahof is a residential garden that took a plain area behind the houses on Da Costastraat and transformed it into a lush garden with a variety of plants and flowers.

Buurtmoestuin de Velden Oo(g)st is a community garden started by a group of residents following similar efforts in an adjacent neighbourhood. It has a shared garden as well as smaller individual gardens growing a variety of edible and non-edible plants and flowers.

<sup>&</sup>lt;sup>2</sup> This garden is classed as a residential garden rather than a community garden due to the limited community involvement in its creation in spite of its location within a neighbourhood.

Freshview, Community Gardens and The Edible City (*Eetbare Stad* in Dutch) are examples of municipality programmes in London and Groningen that support local initiatives by citizens to improve their neighbourhoods, start gardens and grow food within the city.<sup>3</sup> Freshview, for instance, is focused on improving the quality of the environment in neighbourhoods and offers council support in the form of expertise or equipment to perform a range of improvement activities such as building planters and clearing up disused land. The Edible City similarly supports green projects in the city of Groningen through an appointed green participation coordinator that helps get various community gardens up and running.

### 4.1.1 The beginnings of socio-ecological practices

Urban green spaces serve multiple purposes; they are platforms for social interaction and aesthetically appealing spots that offer a respite from city life and much more. However, in looking at what they are it is important to explore how they became that way. Urban green spaces such as parks are often the responsibility of municipal authorities, but there are many other urban green spaces steered by individuals and communities from less than desirable into productive and amenable spaces. According to the goal framing theory (Kruglanski and Köpetz, 2009) as explained in chapter two, normative – and to some extent gain – goals would be a strong motivator to get people involved in community and neighbourhood gardens.

Nevertheless, it appears that normative goals alone would not trigger the start of socio-ecological practices in terms of urban gardening and especially not in the case of guerrilla gardening. In the former case, lack of general societal interest in socio-ecological practices would pre-empt the normative pressure to get involved and it would take the presence of another trigger (in the form or an individual, group or municipal directive). In several cases, there is a lynchpin figure who has the initial idea and inspires or convinces other individuals to join in. In the latter case, guerrilla gardening in its purest form is (perceived to be) an illicit activity which by definition defies societal rules.

In these instances, the theory of planned behaviour would in some ways go further in explaining why people get involved with socio-ecological practices. If attitudes reflect positively on socio-ecological practices and an individual believes that others would

<sup>&</sup>lt;sup>3</sup> To read more about the gardens and programmes mentioned above a list of links to those which have websites is provided in the Appendices.

approve of their actions then it is likely that they will have a high intention to get involved with socio-ecological practices. The last and perhaps most important aspect of the theory of planned behaviour in this case would be what the perception of the possibility of performing (perceived behaviour control) socio-ecological practices is. Dajana Heremic, resident and gardener at the ORKZ succinctly states, *"It has so gotten much into our mental system that 'oh that's not mine' until you don't even think about it, so your world gets really small. Yeah when you have that freedom of thinking 'yeah, I can do something with that', then world or the system can change."* In this way, individual, community and municipal actions to facilitate, popularize and make accessible these activities, goes a long way to making people get actively involved because of increased accessibility.

The popularization of guerrilla gardening has made it more visible, which to a certain extent has eradicated the conflict between the desire to improve a piece of public space (something that should be approved of) and illegal actions (something that is disapproved of). Case in point, the guerrilla garden in the ORKZ received no opposition from municipal authorities. This perhaps begs the question: if the authorities endorse guerrilla gardening, is it still guerrilla gardening? Bob Hovenkamp of the ORKZ Tuin has this to say, *"What we do on the parking lot is guerrilla gardening because it is not our property, nobody really knows who owns it and it was overgrown and we just squatted it. So that's guerrilla gardening at its best I think. These days it goes more from the bottom and the municipality creates the opportunities to – if people want to do something – they don't say you are not allowed, they say 'what can we do to help you make it happen?'. So that's not really guerrilla gardening, but it's a different way of organizing things."* 

There are still people that would hesitate to guerrilla garden because of its illegal status, but this may change. Richard Reynolds – guerrilla gardener, activist, one of the founding members of Mobile Gardeners at the Elephant and Castle, and author of *On Guerrilla Gardening* – is working towards this and says in regards to guerrilla gardening that he has done "a lot of lobbying and work with the media to try and make it feel more acceptable as a strategy for shaping neglected public spaces". He went on to say: "Guerrilla gardening can only go so far. It's only going to appeal to a limited number of people. Ultimately, the fact that it's illegal is going to deter people from joining in. And that's why I would love more authorities to behave like

Lambeth<sup>4</sup>." However, illegality is not the sole reason that individuals might not take up guerrilla gardening. "You think plants will get stolen or people will think you're weird, there are lots of reasons why people don't guerrilla garden that aren't about the criminality of it," shared Richard, "Again, that's what my website, my Facebook page is trying to show people 'look what others and look what I have achieved, you can do this too.""

It is my observation that a combination of hedonic goals (goal framing theory), a positive attitude (theory of planned behaviour) towards socio-ecological practices and affective motives override subjective norms and normative goals when it comes to guerrilla gardening. A single guerrilla gardener or a small group of guerrilla gardeners are driven by a passion for gardening and/or a desire to make a statement. When driven solely by passion, such gardeners can and often do remain anonymous for years, carrying out their activities without acknowledgement. Richard had this to say about guerrilla gardeners he has encountered: "Particularly people who have been guerrilla gardeners for a long time, so they are dedicated to it, what motivates them is an obsession with gardening. They are gardeners, they love gardening, they really care for their plants, they look after them. Some of them have their own gardens – private spaces – but they see the exciting opportunity to garden different land that's not theirs." Gardening is worth engaging in for these individuals because of the personal, internal contentment that it provides (De Young, 2000 in Steg et al., 2012). Such individuals do not necessarily even consider themselves guerrilla gardeners, in the words of Barbara van Dyck, a researcher and activist, "They just do as they have being doing basically for all their lives. It's not that they don't know the practice." I found this to be true from my observations as well. While one may get into gardening because of its current popularity, one stays in it because they are dedicated. This is no mean task and requires sustained time, effort and resources.

Richard also recognizes other groups of guerrilla gardeners, such as those with social objectives, *"For them gardening is means of hanging out with likeminded people and having fun – the mischievous side of it is probably of greater appeal to them"* and those with other agendas, *"they may be politically motivated or artistically* 

<sup>&</sup>lt;sup>4</sup>Lambeth Council in London has taken a pro-gardening stance that encourages individual and community initiatives, giving a platform to Richard Reynolds talk to communities about the guerrilla gardening that he is involved in and has popularized over the last decade. Community Freshview is one of the programmes that the council backs promoting socio-ecological practices.

motivated or commercially motivated but what they are trying to do is seek attention and their gardening would usually take a more provocative form. It may be very short lived. They may be planting in the middle of a road, they may be digging up an immaculate space, an odd location that is perhaps not suited to gardening, but makes a thought provoking statement and therefore achieves their ends of perhaps communicating a message." Those who desire to make a statement bring attention to their activities, which in some instances means that guerrilla gardening is a means rather than an end. Therefore, identity – both personal and social – whether in being a gardener or an artist using gardening as a form of expression, contributes to engaging in socio-ecological practices as a product of symbolic motives.

Guerrilla gardening is not the only socio-ecological practice enjoying the upswing of the popularity of being green. Jan van der Til, artist and gardener at Tuinwijck and Da Costahof (which he single-handedly designed and got off the ground) thinks that allotment gardening is *"very popular at this moment. But there was a time when it wasn't popular and so it has also to do with fashion somehow, but in general cities should be more in contact with nature."* Beyond popularity, the recognition of value is significant, while Tuinwijck has free spaces almost immediately taken up; the Da Costahof enjoys less appreciation, with residents being far less involved. *"It's a beautiful place,"* said Jan, *"I thought people will enjoy it, will value it, they will come with questions – how to participate even – and nothing happened. There is a difference between ideals and reality."* 

The norm activation model (Schwartz, 1977; Schwartz and Howard, 1981; Steg and De Groot, 2010) also offers a compelling explanation of involvement in socioecological practices. With its key aspects of problem awareness, ascription of responsibility, outcome efficacy and self-efficacy (see chapter two), it predicates the idea of identifying a problem. All of the individuals interviewed stated that there was a problem in one form or another, whether a reduction in budget or an unsightly space near their residence. Additionally, gardeners believed it was their responsibility to do something rather than simply wait for the municipality to make a change (outcome efficacy). Socio-ecological practices are a popular tool, with communities coming together in a shared effort to garden, to act on the identified problems. that they would facilitate initiatives which bolstered the self-efficacy of numerous groups.

According to Susan Sheehan, Senior Policy Officer with the London Borough of Lambeth, socio-ecological practices have an important role to play in the city. She noted the importance of "just having more connected communities that look after one another and are less dependent on council services which are being cut." Barbara shared this sentiment. "It's a way of overcoming this idea that there is no alternative and that you can do nothing. It's a way of reclaiming your city," she said, "It's this creation of a feeling that you can do things and in a way overcome the feeling of alienation or disconnection. I am talking about disconnection with your environment. Disconnection with your food, like the relation people have with food. Disconnection with your neighbours, so it's like this gardening, guerrilla gardening, has a large potential in restoring some of these lost connections."

In the words of Hardman (2014) guerrilla gardeners "come from different backgrounds and all have different reasons for pursuing their action." It is important to note that while there are a multitude of motives for engaging in socio-ecological practices some of these may overlap and people may have multiple motivations for getting involved.



Photo 1. The Mobile Gardener's Park (Source: mobilegardeners.org)

#### 4.1.2 Networks and progress

Individual gardeners form the base of people actively involved in socio-ecological practices. For whichever reasons that they start, compliance by others is often a crucial ingredient in the long-term success of their activities. But who drives the agenda? While the municipalities are increasingly encouraging of socio-ecological practices, they are not the initiator of them, instead playing a role of facilitation. This is a scenario with which everyone seems very pleased. Interviewees unanimously placed the responsibility for initiative on individuals and communities while giving the municipality the role of facilitator.

Wout Veldstra, current Food Policy Coordinator and transition worker for Groningen Municipality had this to say: "When we make the plans and we say 'you should do that' then it doesn't work. And so our principle has been from the beginning that we react on initiatives of the people. But they have to make a start, they have to organize themselves. We ask that they must be more than five people together working on it and the inhabitants that are living nearby must agree." Susan Sheehan concurred, "It's important to us that it is a true community space, especially if it is on communal land ... we are always looking for a group of people. Trying not to work with one person or two people."

It is however not unheard of that a municipality does not support independent socioecological practices such as guerrilla gardening, perhaps due to an ascription of responsibility to manage public spaces to higher authorities rather than citizens. A strange paradox thus emerges with different views between municipalities; guerrilla gardening remains illegal while it is not actually actively punished in most cases.

There is a positive trend towards letting citizens be actively involved in the governance of urban green space. Municipalities are acting as facilitators to citizens' rights to the city, helping them and guiding to make the best of their initiatives. However, the onus lies on people getting together with a shared goal and clear vision. Therefore, both the municipality and the citizen have certain obligations. The obligation the citizen has is to identify a space that they wish to care for, to get their community together and to come up with a rough plan that all parties consent to and then to take this to the municipality in question. The municipality on the other hand has the obligation to hear out all potential initiatives and facilitating those they deem to have a chance of success. In this way, they weed out those unlikely to go far which

is usually based on the overambitious nature of a plan or dissent within the community.

Making things work is always a challenge, especially in light of budget crunches necessitated by the aftermath of the economic crisis. The efficient use of resources is essential. According to Wout, "We try to do most of it without any money, and that's also from one of my principles because I think money is mostly deadly for creativity; so I give you money and you don't think anymore, you just buy something. And we try to make the people more creative; and you are the most creative when you don't have any money." Fiscal considerations are part of the situation in London as well, "Most councils are trying to contract at the moment. We do have massive funding cuts. So we're doing less, and I think it's taken a little while for people in Lambeth to understand the value and the benefits of food growing," says Susan Sheehan, "There's still an issue around how we can make it more beneficial. We could think about how people could get jobs out of growing food. We're not saying 'oh, we're doing it all, that's fine', there's still more development work to be done." This is not to say that the municipalities often turn down initiatives, but they use their overall perspective and expertise to direct their resources to the initiatives that are most likely to make a change. They do not always get it right, but more often than not, they do.

This begs the question: do people need the municipality's endorsement and support to be successful? Yes and no. From my observation, socio-ecological practices can be independently successful in the right circumstances, with people willing to dedicate their time, effort and resources to make things work. This is not to say though, that the municipality's support would be unwelcome or, in some particular cases, necessary. *"We don't need them, no. It's nice to have the support and it's nice to know that they like what we do,"* said Bob Hovenkamp, *"We decide what happens here and nobody else does."* Most interviewees reflected this opinion, with some arguing that the municipality ought to do more in situations where the community is unable to get things off the ground themselves, but all agreeing that a willing community is a key ingredient to success.

Is there a magic formula to get it right on the part of the citizen or the municipality? No. Things are very context specific with decisions made on a case by case basis. The myriad of goals that different socio-ecological practitioners have reflects this. Just as motivations are varied, so are goals. Margo Slomp, a Resedastraat resident and one of gardeners in Hof van Reseda, said that, *"The goal was to have more use of this unused space behind our houses. I do not think we could have foreseen how big the impact would be. We didn't expect it to be such a success ourselves. I mean it means that literally that we have extended our gardens in an enormous way, because it's not just extra space you now have behind your house, but this whole thing behind it that becomes part of the garden."* 

Getting to the point of success for community gardens is a collective effort that requires active and sustained collaboration. The most important thing, it appears, is coming together to make things work. According to Bob, *"There were a few people who had the same ideas that would be nice to get that done. They needed a group of people to get the project on the road and make it happen, because it's such a big garden you cannot do it on your own. And if you do it on your own then you come to the next bit and the third bit, then the first bit is overgrown again." Viewed from this perspective another important thread emerges: the idea. Everyone has ideas about what is right, what is wrong and what is best. Some of these ideas may conflict, but out of conflict it is possible for opportunities to emerge. For instance, Barbara spoke of the opportunity to create dialogue in regards to potential conflict between guerrilla gardeners and public authorities and citizens." In general, interviewees almost unanimously mentioned the importance of getting people to think or be more aware and then to work together.* 

Everyone attaches a certain value to green space, more so if they tend to it themselves. Appreciation from strangers as well as self-recognition of their achievements fills them with a sense of pride. The recognition of value by those previously unaware of what could be possible is also a positive effect of socioecological practices. But credit should be given where credit is due. It is difficult to receive appreciation if people do not notice that you have done anything at all, in that way guerrilla gardeners struggle more than urban gardeners do. A guerrilla garden, often worked on by an individual who does not take credit for it, may be attributed to the city, which might not be doing anything at all, so people do not appreciate the effort that has gone into it or realise the potential for action independent of the authorities. Richard, who is starting to consider marking his guerrilla efforts, echoed this sentiment, "*if the gardens that they* [guerrilla gardeners] *create are not credited to a guerrilla gardener or even if they are not credited to an amateur, to something informal, then they are not making a difference.*"

While gardens did have instrumental, symbolic and affective functions (theory of the meaning of material possessions), instrumental functions seem to be the least important to gardeners while symbolic and affective functions dominated interviewees' discussions. Contrary to popular opinion that the output of urban gardens (instrumental function) in terms of food or ecological services being a major goal of gardeners, I found that they had much more modest aims. Some even eschewed the idea of making the city more sustainable, but it was common to have localized or personal goals such as making their neighbourhood more attractive or teaching their children about growing food.

Socio-ecological practices as tools of learning and rediscovering a connection with nature that seems to be lost in many urban areas was a recurring theme among interviewees. "I think people have forgotten how to even make their own food, and if you begin just with a small project, like even growing your own broccoli, whatever, you can learn again, this is how food is made, how it exists. It's a small step towards sustainability," said Dajana Heremic. Henkjan de Haan, one of the initiators of the Hof van Reseda shared this opinion saying, "I think the main reason why you have these community gardens is for children, to teach them about growing vegetables; the way things grow – to get a feeling with growing plants and the animals. If you don't know where lettuce grows, how it grows… yeah ok, you eat it, but you have no affinity, no feeling with it." These connections reveal the importance of time, with socio-ecological practices bringing about a different kind of rhythm and pace to a city, a new temporality so to speak, based on natural growing patterns.

In regards to the role of socio-ecological practices having the instrumental function of being producers of food and increasing food security, Esther Veen, a PhD researcher at the Applied Plant Research Institute of Wageningen University and Research Centre (WUR) said, *"I don't think that's necessary. I mean that we have the rural areas, so what are we going to do with them if we grow everything in the city? I think that's useless. I'm being a little bit blunt, but I think that question is counterproductive, because I think the point is not that we eat only from what has*  been grown in the city. If you look at food, the point is that we can grow fresh things closer to home." Bob Hovenkamp was of the same opinion, in his words, "A city can't be self-sustainable. I do not think that is the concept of a city. I think you can actually do more, but I think to feed a city you need big scale agriculture."

However, Esther did think that urban agriculture for food could perhaps be more relevant in food desserts where people have no access to fresh food, which is logical because their instrumental function would be the primary motivator for individuals who lack other options. Wout Veldstra had this to say about urban food production, *"We are not trying to feed the city with local initiatives, that's impossible. What we are trying to do is to grow a new awareness with the inhabitants that food is one of the most essential things you have to achieve to go on living."* He highlighted the current disconnect between production and consumption, *"Since the Second World War food has been out of our reach. It is processed somewhere else."* 

In terms of ecological functions, there is the question of whether locally grown produce would in actuality play a role in reducing carbon dioxide emissions. Research at WUR uncovered interesting results. *"If you get everything from local farms and very urban areas, they found the carbon dioxide would actually make no difference because people take the car and go to those local farms, so the consumer kilometres for getting there are much higher and also the distribution is less efficient than for the supermarkets, for example, and therefore you don't really save much carbon dioxide,"* explained Esther, adding that in the case of allotment gardeners, *"If you would calculate the kilometres, because lots of these people go by car to their allotment, if you would calculate like five times a week going to your allotment by car and then getting your tomatoes compared to getting tomatoes from Spain I'm wondering if it is really* [saving on carbon dioxide emissions]." Nevertheless, in regards to biodiversity urban agriculture is ahead because unlike traditional rural *agriculture there is* less monoculture, Esther pointed out.

Clearly, there is often a large divide between the perceptions of the achievements of socio-ecological practices: of what can be and what actually is. Interviewees has mixed opinions about what role gardens could play for the city as a whole, but positive thoughts on what gardens do for the people directly involved. This could be the most telling thing of all, because while it is true that one initiative makes a

relatively irrelevant footprint in the city, the ideas it inspires and the collection of numerous small initiatives can potentially have a massive impact which is unintended and currently unforeseen.



Photo 2. Hof van Reseda (Source: Author)





Photo 3. Insect hotel at Hof van Reseda – left. Photo 4. Beehives at the ORKZ – above (Source: Author)



Photo 5. Shared space at the Tuinwijck garden complex (Source: Author)



Photo 6. The Wild Garden at the Tuinwijck garden complex with pond in the background (Source: Author)

#### 4.2 Reaping the harvest: what next?

Are people achieving what they set out to do? While not all socio-ecological practice initiatives are successful, most of them are doing exactly what they want and people involved are happy. What they have done is take unused or underused spaces and convert them into places of societal convergence. The transformations are evident. But it is important to distinguish the types of transformation that have occurred. I divide the transformations into three categories: physical, social and within the policy arena. These transformations often occur together, but not all are evident in connection to all socio-ecological practices.

Physically, the blooming of flowers in spring and the harvest of vegetables is a clear testament to the transformation of a space. Often what is needed is just giving green a chance, in the words of Wout Veldstra, "Nature is very opportunistic, so every chance you are giving to nature, it will grab immediately. So when you know what you are doing and you are steering on quality like I said, nature will use the space you give it or nature will develop in a way you want. So it's more the problem that in the city there is not so much room for nature." Many of the spots currently occupied by gardens were previously less than attractive to look at and certainly not the sort of environment conducive to staying in. The aesthetic improvement of a space is a priority to many gardeners. As Bob said regarding the ORKZ Tuin, "For me as a person it's just to have a beautiful garden." However, the improved aesthetic is also important to another kind of transformation: the social transformation.

With the availability of a beautiful space to gather in, many interviewees reported an increased interaction with their community. This took place not only at the finished stage but also actually in the beginning as well, as individuals get together to discuss, plan and plant. Though it is important to note that this is not necessarily the case, Bob pointed out that the ORKZ *"is already a community where people work together a lot. You have some places in the city where people live in their own houses in a street and there is not much social connection between the neighbours and then you do a gardening project, I can imagine that the impact would be bigger than it would have been or that it is here."* 

Nonetheless, when it does happen, societal transformation is not just on a garden to garden scale, but also takes place more broadly across a city with one garden often inspiring gardens to start up in other areas. This may go some way towards increasing the equity of urban green space while addressing distributive as well as interactional aspects of socio-environmental justice (Low, 2013). *"I always said it's not lettuce and not green peas that are the produce of your garden, it's social contact and people working together,"* shared Wout, *"That is the real product of the Edible City."* This spread of ideas within between individuals and communities leads not only to the physical greening of the city but also to the greening of perceptions, with people beginning to recognize the efforts of others, but perhaps also to think about what efforts they themselves can make. *"I think there is more consciousness now about using these spaces for agriculture or city gardening or stadslandbouw as it's called in Holland,"* shared Bob, *"The concept is more in the mind of not only the people, but also the people who govern cities."* 

Within the policy arena developments vary. While some municipalities and cities embrace the greening of policy and do all they can to facilitate socio-ecological practices, others lag behind. It is also interesting to note the difference between municipalities, with some being the front runners to inspire more of their citizens to initiate socio-ecological practices, putting socio-ecological practices and public participation at the centre of plans for the greening of cities. *"That's our task as a municipality: to help our inhabitants to be happy, to live a good life. To be healthy, to develop themselves – that's our task,"* says Wout Veldstra. Others are learning from their citizens, seeing the positive effects of socio-ecological practices and working towards developing city plans that are friendlier towards these initiatives.

One thing is clear however, that the role of the municipality in all these plans is not being the initiator. Instead, the municipality waits on communities to bring them their ideas. As such, there is a strong tendency towards bottom-linked practices in the planning of socio-ecological practices and enthusiasm for this is not just from the municipalities facing financial challenges. Margo Slomp advocates this approach, "You can maybe spark something in people, you can push them slightly, but then they have to want things themselves. So if you can facilitate that then... so if you do this, you push people slightly and then they start an initiative, and then as the Municipality you then jump into it and say 'ok, we can help you with that' - that works the best."

Citizens are the initiators and the municipality is the facilitator. As such, the destiny and success of urban green space falls in the lap of the inhabitants of a city. In the words of Dajana Heremic, "I think more success comes from when people do it themselves and like I said like put in their own effort and money, and when it comes from their own wanting it, then it's more powerful and people really do it and fix it better." She went on to add that "This creativity to grow stuff or to make stuff and to use the space that's around you, that's natural to people." Valerie Martens-Monier a gardener in the Buurtmoestuin de Velden Oo(g)st shared this opinion: "I think things work because there's self-initiative, you know, you put energy into it and then you want to make it work."

This is certainly not a top-down approach to planning, but neither is it fully bottomup, rather is sits somewhere in between and relies on consensus between all the parties involved, bringing together the top and bottom in planning and decisionmaking which advances procedural justice (Low, 2013). When asked about the role of authorities in the future of greening cities Wout Veldstra replied, *"I think the role of the city as a municipality will diminish, and the role of the public and the common use of green by inhabitants of the city will grow more, and I think and I hope people will cooperate more, will communicate more and also will be less individual, and living together in the city that is green, because a green city is good for your health."* On the planning spectrum from technical rationale to communicative rationale, it lies on the communicative end of the spectrum, relying on dialogue between actors. Solutions are not universal, as mentioned previously; decision-making is on a case by case basis. This is because what works in one instance and place, may not work in another and there are no panaceas (Ostrom and Cox, 2010).

In the discussion of starting socio-ecological practices and who is involved with them and why, it is important to not lose sight that starting things is only a small part of the process. Place-making is a challenge but place-keeping is more so because it looks into the future and the efforts necessary to maintain a place. Putting thought into the future of your garden was a point that Valerie made: "You also have to think when you start something that you have to keep it; you have to maintain it." Laurens Stiekema, the Green Participation Coordinator for Groningen Municipality who has had contact with almost all of the garden projects in the city of Groningen, shared a sad but all too true fact of participation in socio-ecological practices: "In the beginning they are enthusiastic, but after one or two meetings they will say 'we don't like this, it's too much work'." Ingrid Bolhuis from the Hof van Reseda said, "I *think you will have to have people who are interested in these things and think it's a nice to do.*" This links back to the hedonic goals and positive attitude that we can consider as the essential elements for a gardener to possess. In order to devote time, effort and energy not just to make a place, but also to keep it long-term, there must be sustained enthusiasm and dedication beyond the initial thrill.

#### 4.3 Sustainability and other stories

It was interesting to find the divided opinions on the potential of socio-ecological practices in the big picture of sustainability. While we often herald urban agriculture as a potential solution to increasing the production capacity of cities, as a consequence reducing food miles and making cities more sustainable in terms of consumption as well as having other environmental benefits, the real situation is less clear. The term sustainability is fuzzy, with multiple interpretations drawn and different facets of sustainability (environmental, economic and social) in possible conflict with each other. With differing opinions and agendas on the line, perhaps it is possible to reconcile diverging views with a redefinition of what sustainability means on a smaller scale. This would require abandoning the environmental, economic and social categorizations of the notion of sustainability and embracing the variety of potential sustainabilities on a place-based level.

This new relational definition would rely on the governance of specific places to tailor make a sustainability plan or approach that does not rely on a panacea-like definition, but rather plays to the specific abilities and capacities of different places. Socioecological practices would be just one of the elements of this kind of governancebased sustainability, promoting social innovations and urban transformations within the recognized limits of a city. This will go beyond the traditional values assigned to urban green spaces in terms of aesthetics or ecological function, finding new values and utility in previously unthought-of ways. Richard Reynolds had this to say about the potential of guerrilla gardening, *"What guerrilla gardeners are good at doing is seeing those little patches that have been forgotten about. It's really maximizing the resource of our landscape in a city which those who run the city haven't appreciated. In the way that a big park or a prestigious location, the city would put money into and they would try maximize its utility to us and the environment, but what guerrilla gardeners do is pick up the scraps left over and turn those into sustainable spaces and manage to look after them with very little resources."*  Conceivably the most important thing about the sustainability debate is not the creation of a definition but the fact that it is being talked about. The ideas that socioecological practices aim to inspire may be the most sustainable thing of all, causing predominantly positive ripple effects across communities and cities in which they take place. The Buurtmoestuin de Velden Oo(g)st took inspiration from a neighbouring garden, Valerie Martens-Monier had this to say: *"When we saw what they did, we thought 'let's do it on our side as well'. That has really improved communication and there have been new bonds created."* She added that, *"You do get attached to it, I think when it will be gone it will be a big disappointment for everyone, but who knows, the contact between the people will stay."* 

That inhabitants can make and re-make a city is also important to sustainability in this way. It is the recognition and embracing of the power to transform that can be harvested by citizens. As said by Barbara van Dyck, "An important element in creating the sustainable city is this idea to overcome the paralysis or the idea – a kind of collective apathy – like this idea that we can't do anything, there is no alternative. It shows possibilities. It shows all the things you can do with the city. So that's also something which is really crucial if we want to build sustainable cities. We need more this feeling that other things, or in other words, other cities, are possible."

The effects of socio-ecological practices have lasting effects. I can personally attest to this. The observations of the lack of greenery in my home town while growing up have stayed with me. Almost twenty years after I planted my first seeds in a corner of my garden, optimistically declaring to my parents that we would never have to buy vegetables again, I have talked to and read about many people driven by a desire to do something – for themselves, for their communities and for their cities. The ideas they have had, have turned into actions and these actions are making a difference.



Photo 7. Da Costahof before gardening (Source: Jan van der Til)



Photo 8. Da Costahof after gardening (Source: Jan van der Til)



Photo 9. Guerrilla garden at the ORKZ (Source: Author)



Photo 10. Potted herbs at the ORKZ (Source: Author)

### **CHAPTER 5: CONCLUSION AND RECOMMENDATIONS**

#### "Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has." Margaret Mead, Cultural anthropologist.

With the status quo as it is from the findings in the previous chapter, this chapter connects the findings of the study and their implications to real world policy interventions. Not only showing the relevance of data collected to urban planning theories, but also their practicability in the field of planning practice. Firstly, I posit an answer to the research question and reflect on this answer in light of the field of planning. Secondly, I propose policy recommendations while taking into account the research findings. Lastly, there is a general discussion of and reflection on this thesis and, while looking back at the potential gaps in knowledge identified in the previous chapter, I suggest areas of further research.

#### **5.1 Planning for the next season**

The city is not just brick and mortar, the city is a shared experience, intangible, powerful and organic. While we plan for roads and houses, we must not forget the people. People who seek out connections, to the city and to each other and sometimes just need the facilitation to take their ideas and shape them into places and experiences that are the essence of a vibrant city. It is essential for citizens to know, in the words of Margo Slomp, *"that you can do things like this with space in the city and that it's not just all stones and buildings."* In the first chapter of this thesis, I posed a research question. It asked: "How do contemporary socio-ecological practices, such as guerrilla gardening and urban, transform the urban landscape and urban spatial planning policies and vice versa?"

While the question is multi-faceted and the previous chapter goes in depth into findings, it is important to state that these practices do make transformations. Some of these are clearly tangible (a vegetable garden in place of an overgrown and unused parking spot), while others are intangible (a greater feeling of social cohesion between neighbours). Three main types of transformations were palpable: physical, social and political/systemic transformation. Not all these transformations were evident or applicable in all the cases, but they were there. How these transformations manifest themselves – who transforms what – was in some instances obvious and in others not. Most directly, people transform the physical landscape and in some instances the political/systemic landscape by positively influencing policy, for instance, Lambeth Council giving a platform to Richard Reynolds. Conversely, policies also played a hand in transforming the social landscape by making communities coming together to garden with municipality facilitation. Lessons that can be drawn by researchers and planning practice are not black and white, while there are many success stories, there are also failures and we must be cautious to not adopt a one-size-fits-all approach to the governance of urban green space.

Two aspects have stood out to me while looking at these interactions and transformations. Firstly is the power of socio-ecological practices, in spite of their small/local scale or perhaps because of it, to foster and encourage place-making and place-keeping and secondly the enthusiasm for and support of governance of urban green space in the form of bottom-linked practices. With a strong leaning towards social initiatives and innovations taking the lead role with municipalities being facilitators more on the side-lines. In the case of the former, power is realised by claiming the rights to the city and understanding that it is possible to do things and make a change and in the case of the latter the recognition that responsibility for making and re-making the city is joint and there must be a sharing of competencies, capabilities and resources while creating and finding connections to nature within the city.

Bearing all this in mind, this thesis contributes to an improved understanding of the links between aspects of behavioural theories and how they serve as a base of motivation towards participation in socio-ecological practices and bottom-linked practices as well. In other words, bringing out connections between motivations, actions and impacts. Referring back to figure 2 (p27), we can see that several links can be drawn between the different theories of behaviour discussed in this thesis and these feed into socio-ecological practices and bottom-linked practices which in turn fuel place-making and place-keeping processes within the city. The relevance of this to planning is that when we understand why particular activities or processes take place and why they work in some instances and not others, we can use this to make more integrated plans in tune with the transformation of urban landscapes. Plans

that are more in sync with citizens needs and desires and in line with the capacities of all parties involved while rethinking untapped potential within the city. This is key in building successful long-term collaborative governance of urban green space that leads to greater satisfaction and utility which in turn leads to improved quality of life in the city.

#### **5.2** New season – new policy: recommendations

While it may have been the most obvious, tempting and optimistic choice to recommend the integration of community gardens into all current and/or future neighbourhood plans, it is unrealistic to imagine that all citizens are able and willing to participate in socio-ecological practices. In short, it is counterproductive to force the matter. Policy should instead aim at targeting the people that are willing or at least willing to try, building upon fostering social initiatives and bringing out untapped potential.

My first recommendation is integrating planning into early education. School programmes/classes/projects; for example, field trips through a city documenting urban change with geotagged photos to create a virtual cityscape that can be used as a dynamic teaching experience and tool for educators. This will allow younger generations to find a connection with places in the city in an interactive and creative way. Planning for the future of the city may not be practical from this stage but getting people of all ages to start thinking about the city in new ways, building positive affect towards urban green space is a good first step. The applications of this go beyond just the governance of urban green space and are multi-disciplinary.

Inspire	Invite
Build affect and connection to the city and green spaces in basic education	Open the city to citizens' ideas giving them a platform for expression and building self-efficacy
Include	Integrate
Get tertiary educational institutions involved in practical green space governance projects	National support for social innovations while building improved green space governance networks

Figure 5. Recommendations

My second recommendation is to have a public campaign to garden urban fallow inviting ideas and participation from the public with municipality facilitation. Sometimes all people need to know is that they have permission. While there is no guarantee of success, giving citizens leeway to transform untended areas of the commons may lead to the infusion of fresh and creative ideas. My third recommendation is to get colleges and universities involved in green space governance by using urban green spaces as templates to learn from and practice on with student based projects. This is possible across a wide array of disciplines including but not limited to Art, Architecture, Environmental Studies, Ecology, Landscape Design and Planning, et cetera. Not only will this improve the educational experience by providing practical knowledge through interaction with the urban landscape, it also gives opportunity for innovative thought to flourish about the governance of urban green space.

My fourth and final recommendation is for national-level endorsement of socioecological practices. The success of city and municipality level facilitation programmes is some proof that bottom-linked, socio-ecological practices have a variety of benefits to cities and citizens. While locals need the support of knowing their city approves of their actions, cities too need support from higher levels to share expertise and experiences on a larger scale that can lead to improved green space governance networks.

I centre the above recommendations on collective learning and thinking, because the making and re-making of a city lies within the collective consciousness of its inhabitants and it is important to make steps towards awakening and then facilitating that consciousness. We ought to embrace cities as the cultural hotspots and hubs of biodiversity that they are. It is important to move beyond uniform ideas of what a city ought to be and, as planners abandon the "collective apathy" referred to by Barbara van Dyck and explore what a city can be. We can find possibilities and potential within the diversity of the city, many of the successful socio-ecological practices are proof of that. Nevertheless, good cities need good keepers and while making places may be easy, keeping them requires dedication.

#### **5.3 Discussion and further research**

As has been discussed previously in this chapter, transformations of different sorts are apparent due to socio-ecological practices within urban space. Perhaps we must ask the question: which of these transformations is the most important? While the statement made by physical transformation can be profound, I would argue that what is critical is the transformation of the idea of what an urban space should be or could be and the idea of what living in an urban area is or can be. This treads the line between thought and action and between an idea and a transformation. While this happens initially at a micro scale, by an individual or group of individuals appreciating and/or working towards more productive green spaces, changes at a macro level may eventually be seen as a result of the trickle upwards of social needs that must be met.

Of course, it is important to recognize the limitations of the research, in that the inferences and reflections drawn from the collected data are coloured by my subjectivity. Additionally, the subjective views of the select individuals that I interviewed during the course of research naturally influenced my findings. It is also important to note that the distinct lack of literature on guerrilla gardeners as well as difficulty finding active, long-time guerrilla gardeners created a small void in data. However, it is precisely for that reason that it was important to study this topic. Nevertheless, there remains a need to further research this somewhat elusive species of socio-ecological practitioner.

So, how do socio-ecological practices transform the urban landscape and spatial policy? They change "a vacant lot" into "the community garden", they turn "overgrown corners" of neighbourhoods into "my vegetable patch" or "where the children play". In a nutshell, they empower people to find new values in urban space, turning neglected spots into places with meaning and memory, ultimately connecting the individual with the urban fabric. Do socio-ecological practitioners need the city or does the city need them? I would argue a little bit of both. People make places what they are, but places can also make people who they are, there is symbiosis.

The city is an idea, not just one big, single idea, but the collection of plenty of small ideas, inspired and powered by the people who live there. Planning is also an idea. More and more city planners are embracing the ideas of inhabitants and shifting from top-down models of planning into the role of facilitators. This transformation is not one-way or static, it is a dynamic, two-way learning process. There are successes and there are failures. Within this thesis I have looked at where those ideas begin, how they flourish and where they can take us and so I have made policy recommendations, but they too are just an idea.

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## **APPENDIX 2: LIST OF INTERVIEWS**

Name		Date
Barbara van Dyck	Researcher and activist	10 <sup>th</sup> July 2014
Bob Hovenkamp	Resident/gardener – ORKZ Tuin	17 <sup>th</sup> May 2014
Dajana Heremic	Resident/gardener – ORKZ Tuin	15 <sup>th</sup> April 2014
Esther Veen	PhD Researcher – Wageningen University and Research Centre	23 <sup>rd</sup> May 2014
Henkjan de Haan	Resident/gardener – Hof van Reseda	17 <sup>th</sup> May 2014
Ingrid Bolhuis	Resident/gardener – Hof van Reseda	17 <sup>th</sup> May 2014
Jan van der Til	Artist and gardener – Tuinwijck; Da Costahof	26 <sup>th</sup> May 2014
Leo Dijkstra	Landscape Designer – Groningen Municipality (Gemeente Groningen)	20 <sup>th</sup> January 2014
Laurens Stiekema	Green participation coordinator- Groningen Municipality (Gemeente Groningen)	10 <sup>th</sup> June 2014
Margo Slomp	Resident/gardener – Hof van Reseda	17 <sup>th</sup> May 2014
<b>Richard Reynolds</b>	Guerrilla gardener, activist and author of <i>On Guerrilla Gardening</i>	22 <sup>nd</sup> May 2014
Susan Sheehan	Senior Policy Officer/ Sustainability Officer – London Borough of Lambeth	27 <sup>th</sup> June 2014
Valerie Martens- Monier	Resident/gardener – Buurtmoestuin de Velden Oo(g)st	6 <sup>th</sup> June 2014
Wout Veldstra	Food Policy Coordinator and transition worker – Groningen Municipality (Gemeente Groningen)	22 <sup>nd</sup> May 2014

Table 2. List of interviewees and interview dates (Source: Author)

# **APPENDIX 3: INTERVIEW GUIDE**

## <u>INTERVIEW GUIDE: GREEN RENOVATION – SOCIO-ECOLOGICAL PRACTICES</u> <u>AND THE TRANFORMATION OF URBAN LANDSCAPES</u>

Research question: How do contemporary socio-ecological practices, such as guerrilla gardening and urban gardening, transform the urban landscape and urban spatial planning policies and vice versa?

THEME	GUIDING RESEARCH QUESTION(S)	FOLLOW UP QUESTIONS
MOTIVATIONS/STARTING UP	Why do individuals/groups become involved in socio- ecological practices and what actions do they partake in?	Why isn't GG more recognized? (Most people do not realise what it is until explained to)
		Why isn't there more literature on GG though there is quite a bit on UG?
		Whose responsibility is it to manage urban fallow?
		Who initiates GG/UG activity? Who gets involved at a later stage?
		What are some benefits if any of GG or are there more of UG?
		Is GG worth the effort/trouble?
		Is something like GG just a passing fad?
		Are there any UG/GG activities you are aware of in the area? What do they do/ what are they about?
POSSIBILITIES/	What are their ultimate goals	What is the function/role of
POTENTIAL/ END-GAME	or what do they hope to achieve in	GG/UG in society/a city?
	the short- and long- term?	What do you think the ultimate aims of GG/UG are? Do they achieve their goals?
	Are there tangible and/or intangible transformations as a result of socio-ecological practices in the short-, mid-	Do they make a difference in society? If so, how?
	and long-term?	Do these activities go on over years, just seasonally or only one-off? What is the long- term feasibility?
		If the activities are brief, do their effects out last them (changing opinions, inspiring people/policy)?

		How much potential does GG/UG have to contribute towards more sustainable cities? A lot of UG activities involve growing food, how much can UG contribute to food security?
		Can a city take on roles previously played by rural areas would this be an evolution or devolution if it is possible at all?
		Can large cities shift from being solely hubs of consumption to hubs of production as well?
		Is there potential to recapture lost ecological services and functions within cities?
		What role can GG/UG play in transforming a city? Are big transformations possible? What are the most evident transformations of GG/UG?
		Are GG/UG activities usually successful?
SUPPORT STRUCTURE/ OTHER STAKEHOLDERS/	What network of support is received over the course of their	Are GG/UG more successful if endorsed by the municipality?
SOCIETY	projects and how do the local municipality contribute to their agenda? In other words, what are the roles of actors in	Do gardeners need that endorsement to be successful or do independent projects (self- governance) work just as well?
SOCIETY	projects and how do the local municipality contribute to their agenda? In other words, what are	endorsement to be successful or do independent projects (self- governance) work just as
SOCIETY	projects and how do the local municipality contribute to their agenda? In other words, what are the roles of actors in	<ul> <li>endorsement to be successful or do independent projects (self- governance) work just as well?</li> <li>How can a municipality contribute? What is the process/procedure of getting a project off the ground with municipality involvement (permission,</li> </ul>
SOCIETY	projects and how do the local municipality contribute to their agenda? In other words, what are the roles of actors in	<ul> <li>endorsement to be successful or do independent projects (self- governance) work just as well?</li> <li>How can a municipality contribute? What is the process/procedure of getting a project off the ground with municipality involvement (permission, funding, etc)?</li> <li>What are the penalties for illegal gardening? Are they</li> </ul>

		How do uninvolved people or the general public view GG/UG projects (positively/ negatively/ neutral)?
SPATIAL POLICY/ THE OVERALL SYSTEM	What role do socio- ecological practices play in spatial plan creation, evolution and/or implementation? Do actions link to policy or operate independent of policy?	Are bottom-up social innovations the way to go? Do the municipality get ideas from seeing independent GG/UG projects?
		Should independent socio- ecological practices be incorporated into landscape planning as a rule rather than as an exception?
		If they haven't always been incorporated in city plans, should they be or are they now incorporated? Do current social trends ever guide future policy?
		Are current UG/GG activities in the city a result of being part of the current city plan or did they evolve independently?
		What is the future for greening the city?

General
Academics
Gardeners/Citizens
Policymakers/municipality

## **APPENDIX 4: CONSENT FORM**

#### **CONSENT FORM**

Green renovation: socio-ecological practices and the transformation of urban landscapes

I am an MSc Environmental and Infrastructure Planning student currently conducting research about socio-ecological practices, such as guerrilla gardening and urban gardening, and their role in transforming urban landscapes. My supervisor is Dr Constanza Parra from the University of Groningen.

I would like to interview you about your experiences and involvement regarding the above mentioned socio-ecological practices. The interview will take approximately an hour and I would like to record it so that I can obtain an accurate record of your views. You have the right to refuse to answer any particular question and to ask any questions about the research during or after the interview. Everything you say during the interview will be treated confidentially. The results of this research will be published in my master's thesis.

Name participant:

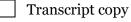
Signature participant: \_\_\_\_\_

Name interviewer: Stephanie Nuria Spijker

Signature interviewer: \_\_\_\_\_

DATE: \_\_\_\_\_

Anonymous



Thesis copy

## **APPENDIX 5: LIST OF RELEVANT WEBSITES**

For more information on the projects discussed in this thesis, please visit the sites listed below.

Lambeth Council Freshview:

http://www.lambeth.gov.uk/parking-transport-and-streets/street-and-roadmaintenance/community-freshview-guide

Groningen 'Edible City' ('Eetbare Stad'):

http://nmfgroningen.nl/eetbare-stad

http://gemeente.groningen.nl/ro/natuur/eten/eetbarestad/stadslandbouw-ingroningen

Guerrilla gardening blog:

http://guerrillagardening.org/

Mobile Gardeners, London:

http://www.mobilegardeners.org/

Tuinwijck, Groningen:

http://www.tuinwijck.nl/

Hof van Reseda, Groningen:

http://www.hofvanreseda.nl/