



“The garden is a place of connection to nature and life”

– The implications of urban green community projects and place attachment to individuals and society

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“The garden is a connection to nature and life” – The implications of urban green community projects and place attachment to individuals and society

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Abstract

In cities, green spaces are important for the citizens' health and well-being. Allotment clubs and community gardens are places that offer many positive functions for participants. They can give refuge, a purpose, recreation and community. These places can be shaped by the participants and give opportunity to influence public space. While these benefits are known, many of these urban places are still under existential threat. In environmental psychology, place attachment is known as a concept of person – place bonds. This study investigates the impact of place attachment on urban green community projects and how this effects the role of these projects in cities. A multiple case study in four urban gardening initiatives in Germany was conducted in three community gardens and one allotment club. It shows that place attachment has a positive impact on the person – place bond, the group – place bond and by that also on the person – group bond. Its functions can be found in nearly all activities in these places. This means that urban gardening initiatives are vital places in cities, as they support social cohesion and the citizens' well-being. Additionally, they give the possibility to participate in public life.

Keywords: place attachment, urban gardening, community gardens, allotment gardens, person-place relationship, public participation, Germany

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Abbreviations

AWO	Arbeiterwohlfahrt (Worker's Welfare Association)
CSA	Community Supported Agriculture
TT	Transition Town
SLU	Swedish University of Agricultural Sciences

1. Introduction

1.1. Green common spaces in an urban environment

In many places, life is divided into a public and a private identity (Manzo 2003). This led to the elevation of home as perfect haven and therefore a favouritism of domestic life in private space over life lived in public places until today (ibid.). Hannah Arendt found a split into private and public when it comes to freedom but also responsibilities (Duvall Jacobitti 1991). According to Arendt, to act in public spaces means, among others, to be part in the public discourse. Allotment and community gardens are (semi) public places where participants are able to express own ideas (Teuber et al. 2019), aesthetics and thereby shape an urban place (Noori & Benson 2016). Because of this place making the gardeners feel a certain kind of ownership and responsibility (Lee & Matarrita-Cascante 2019). Garden initiatives are places which offer the city inhabitants platforms for participation in public life, to be part of communities and to be in dialogue with institutions (Firth et al. 2011). In cities, which face many different urgent topics such as climate change, housing issues and gentrification (Rosol 2010; Ioannou et al. 2016; Adam & Klemme 2020), the COVID 19 pandemic acted as an accelerator for these topics (Adam & Klemme 2020, Karge 2021). This highlighted the importance of green space to city inhabitants and the usage conflicts that occur in these spaces (Basel et al. 2020; Karge 2021; Keilani & Hörnicke 2021). While many benefits of urban garden initiatives are known and used as arguments in discussions about urban politics and planning, place attachment to urban green community projects seems to not have been studied or applied in detail yet in this context.

This master thesis studies the impact of place attachment on the connection of participants to allotment and community gardens. It discusses how these findings can add another quality of arguments to the debate why such places should be a part of liveable cities.

1.1.1. Naming the phenomenon

There are many different ways of how people garden together. In some projects everything is collectively owned and managed, whereas others consist of individual gardens next to each other with a more or less developed community of gardeners (Gustedt 2017). These are the two ends of a broad spectrum. While many collectively organised gardens call themselves community gardens, this term is also used by some researchers – especially in the US – for the more individualised projects (Lee & Matarrita-Cascante 2019). Others use the term “allotment” (e.g. as the book “Urban Allotment Gardens in Europe” by Bell et al. 2016), which usually describes the more formal organisations, for all kinds of community gardening. Some researchers call the broad range of collective gardening “urban gardening” (Calvet-Mir et al. 2016), while, strictly speaking, this term defines every gardening in an urban environment, which can also take place on a private balcony. Other researchers, as Teuber et al. (2019) and Ioannou et al. (2016) use the term “garden initiatives” for all allotment and community gardens and the term “new garden initiatives” for the modern urban community gardens. The latter have existed since the 1960s and which often also have political claims (Ioannou et al. 2016). Gustedt (2017) described general difficulties of finding an umbrella term for the German urban gardening culture. A synonymous use of “allotment garden” and “community garden” is inaccurate (see also Teuber et al. 2019). Judging from my own experience of several years of activity in and working with the community gardening scene in Berlin and Germany and from conversations with allotment gardeners, I agree with Gustedt (2017) and Teuber et al. (2019). To use the same wording for these two quite differently organised working modes is difficult. Therefore I choose to use the terms “allotment gardens” or “community gardens”, when referring to those specific concepts, and the terms “gardening initiatives”, “garden projects” or “urban green community projects” to include all types of gardening projects.

1.1.2. Characteristics of allotment gardens and community gardens

Typically, both allotment gardens and community gardens are not connected to residency (Teuber et al. 2019). While the traditional form of allotment gardens focusses on food production, social contacts, recreation and contact to nature (Teuber et al. 2019), modern community gardens often have additional political and societal approaches (Ioannou et al. 2016). Allotment gardens in Germany are expected to fulfil certain societal and political demands as well, as they provide places for individual food production and recreation (Bundesgerichtshof 2004). Therefore they are protected by the Federal Law of Allotment Gardens which

regulates e.g. (land) usage and renting terms (Bundesministerium der Justiz und für Verbraucherschutz 1983). Reasons to start community gardens could be to give an alternative to allotment gardens because of frustration with long waiting lines for a plot or a “cultural clash” between traditional and more alternative gardeners (Ioannou et al. 2016). Other reasons for starting community gardens could be a certain focus of the project, e.g. on inclusion of vulnerable groups or other models of land use and governance structure (Rosol 2010; Ioannou et al. 2016; Gustedt 2017). While there are similarities between the new garden projects due to social and political processes and a certain international connection, there are still national and regional characteristics (Rosol 2010; Ioannou et al. 2016). A main difference between the two garden types is land usage and organisational setup (Ioannou et al. 2016; Gustedt 2017; Teuber et al. 2019). Allotment gardens are organised in the multi-level structure of allotment clubs by law in Germany (Bundesministerium der Justiz und für Verbraucherschutz 1983; Bundesverband Deutscher Gartenfreunde n.d.). Community gardens do not fall under any specific law and no bigger interest organisation is established yet. Some individual municipalities are in cooperation with community gardens, interested individuals and other actors, e.g. in Berlin (Senatsverwaltung für Umwelt, Verkehr und Klimaschutz 2021). Access to allotment gardens can be more difficult than to community gardens (Ioannou et al. 2016).

1.2. Why participate in a gardening project?

Motivations for joining urban green community projects vary and depend on the person’s background and identity (Noori & Benson 2016; Kingsley et al. 2019; Lee & Matarrita-Cascante 2019; Teuber et al. 2019). Lee and Matarrita-Cascante (2019) categorise the motivations into functional, emotional or conditional. Functional motivations are based in the interests such as having access to fresh, organic or local food, being physically active, being part of a community or being outdoors (Kingsley et al. 2019; Lee & Matarrita-Cascante 2019; Teuber et al. 2019). Emotional motivations are connected to identity and place attachment (Kingsley et al. 2019; Lee & Matarrita-Cascante 2019; Teuber et al. 2019). Conditional motivations include geographical location, required time, community rules, land ownership, reachability and the gardener’s level of knowledge and skills, among others (Noori & Benson 2016; Lee & Matarrita-Cascante 2019; Teuber et al. 2019). Motivations are influenced by several circumstances: A gardener might join a project further away because they prefer the project’s focus to the one of a nearby garden. Belonging to a group of shared interests and activities can give a sense of protection and identity (Menconi et al. 2020). While many people enjoy gardening and being part of a community (Calvet-Mir et al.

2016), it is not an interest of everybody and gardening initiatives can only reach parts of the population (Kingsley et al. 2019).

People who grow up with a connection to gardening in their family or by other ways might join groups to activate this affinity again. For others, who do not have such experiences, it can be an act of rediscovery of agricultural or gardening knowledge (Calvet-Mir et al. 2016; Teuber et al. 2019). Social bonds, contacts and community building are very important motivators as well (Firth et al. 2011; Calvet-Mir et al. 2016). People might aim specifically for the sense of community in a project as they search for a community with similar interests that they cannot find in their daily life or immediate neighbourhood. Even for people who did see this as a main reason to initially get involved in a garden project, it is among the top reasons for staying in the long run (Calvet-Mir et al. 2016; Menconi et al. 2020). In this aspect there seem to be differences between allotment gardens and community gardens (Lee & Matarrita-Cascante 2019). Time is mentioned as important restriction for gardening and participation (Kingsley et al. 2019; Lee & Matarrita-Cascante 2019). There can be a change in the motivations of gardeners over time (Kingsley et al. 2019; Lee & Matarrita-Cascante 2019). The reasons why they started might stand back behind other reasons after a while – up to decades – of being active. The interests and motivations can change in the process, due to different reasons. Motivations partly differ between participants of allotment clubs and community gardens. While in allotment gardens the community factor is only a minor motivation for many gardeners (Lee & Matarrita-Cascante 2019; Teuber et al. 2019), it often is one of the most important ones for community gardeners (Kingsley et al. 2019; Menconi et al. 2020).

1.3. General benefits of gardening and participating in garden initiatives

Gardening has many benefits for people, such as food production, prevention and enhancement of mental and physical health, social contacts and recreational activities (Calvet-Mir et al. 2016; Cervinka et al 2016; Ionannou et al. 2016; Teuber et al. 2019). Gardening initiatives additionally offer a sense of community (Firth et al 2011; Lee & Matarrita-Cascante 2019). In recent times people who are specifically interested in organic gardening joined projects to have access to healthy, seasonal and local food (Lee & Matarrita-Cascante 2019).

In 2016, 10% of the German population gardened several times a week (8,4 million people) and 17% gardened several times a month (14,2 million people)

(Destatis 2017 and Statista 2017 see Teuber et al 2019). This includes all kinds of free time gardening, showing that this is an important activity for many people.

1.3.1. Food production

Food production can be connected to the political topic of food sovereignty, cultural or economic reasons (Calvet-Mir et al. 2016; Ioannou et al. 2016; Lee & Matarrita-Cascante 2019; Teuber et al. 2019). The different stages of dealing with growing food plants, harvesting, processing and eating the food is a chance for people of different ages, ethnicities and socio-economic backgrounds to link (Firth et al. 2011). Even though food production is a focus of research and discussions about gardening projects regularly, it does not have to be the main focus for the gardeners involved (Menconi et al. 2020).

1.3.2. Health benefits

To be outside in gardens has positive impacts on physical and mental health (Kingsley et al. 2009; Hartig et al. 2014; Calvet-Mir et al. 2016; Cervinka et al. 2016). People of all age groups can be physically active in gardens and the garden work can motivate to stay active with age (Kingsley et al. 2009; Calvet-Mir et al. 2016). Gardening can give a focus in life, which is especially important for older gardeners (Calvet-Mir et al. 2016). Gardening tasks, even if they are considered necessary, seem to have another quality than household chores and therefore have a higher restorative potential (Calvet-Mir et al. 2016; Cervinka et al. 2016). Being in a garden can provide stress relief and bring restoration (Kingsley et al. 2009; Menconi et al. 2020), as it can be a form of “escapism from urban stress” (Kingsley et al. 2019:7). The strength of the garden-user relationship is the most important predictor of the garden’s restorative potential (Cervinka et al. 2016).

1.3.3. Contact to nature

Gardens provide an opportunity to get into contact with nature and experience natural phenomena (Noori & Benson 2016; Calvet-Mir et al. 2016; Kingsley et al. 2019; Lee & Matarrita-Cascante 2019; Teuber et al. 2019). Gardeners can make their own learning experiences or are taught by others about gardening as well as the environment (Calvet-Mir et al. 2016; Menconi et al. 2019). Often family plays an important role for the first contacts to nature (Teuber et al. 2019).

1.3.4. Social context

Participants in collective gardens come from quite heterogenous backgrounds, e.g. in age or education (Ioannou et al. 2016; Kingsley et al. 2019). Teuber et al. (2019) found similar data for allotment gardens. The garden initiatives' structure of governance (top-down or bottom-up), space possession situation (owned, kind of contract, squatted) and internal grade of common usage varies individually between projects and influences the group structure (Firth et al. 2011; Calvet-Mir et al. 2016; Ioannou et al. 2016; Lee & Matarrita-Cascante 2019). Urban green community spaces can be “a consequence and a source of social capital” (Firth et al. 2011:564). While the projects may act as meeting places, the available activities offer people of different backgrounds an opportunity to meet and get to know each other. The engagement in a community can lead to resilience and social cohesion (Kingsley et al. 2019; Menconi et al. 2020). Kingsley et al. (2019) found in their case study of community gardens that many participants have been active in other communities before or parallel to their gardening. This can put the gardening community into wider local networks and strengthen social ties.

1.3.5. Political context

Allotment gardens and community gardens provide green spaces in the city which can be actively used and shaped by the participants (Bundesgerichtshof 2004; Calvet-Mir et al. 2016; Menconi et al. 2020). This place making strengthens the level of place attachment and can enhance the political awareness of people (Rosol 2010; Noori & Benson 2016). It is also a chance to get in contact with local authorities and other institutions (Firth et al. 2011; Karge 2021). Community gardens can be a reaction to socio-political situations in countries or on local level (Rosol 2010; Calvet-Mir et al. 2016; Ioannou et al. 2016), but the existence of gardening projects in a neighbourhood can also be part of gentrification (Rosol 2010; Kabisch et al. 2017). Gardening initiatives are (semi) public places which are consume reduced or consume free and which have the potential to be “experimental places for a different economical society” (Karge 2021).

1.4. Place Attachment

Place attachment is the bonding between a person or group and a meaningful place (Scannell & Gifford 2010). Giuliani (2003) writes that attachment in that context does not describe “any specific psychological phenomenon, but rather the

complex of attitudes and behaviours that may be associated with an affective bond with one's neighbourhood" (p. 144). Place attachment can happen on various geographical levels up to global scale. One can be attached to physical places that are not connected to residence, such as natural sites, and even social, non-physical places, such as historical, cultural or religious places (Manzo 2003; Scannell & Gifford 2010; Lewicka 2011). Even though the bond of a person to a place is always of an individual quality (Morgan 2010; Scannell & Gifford 2010), the experience can be on group level (Giuliani 2003; Manzo 2003; Scannell & Gifford 2010).

Place attachment has another quality than interpersonal attachment (Giuliani 2003). However, Morgan (2009) found parallels in their processes, as both would start in childhood, can give a long term bond of attachment and can be negatively influenced with similar effects to the attachments. Other features differ significantly. Place attachment is not necessarily connected to the length of time a place is known and people do not need to be aware of this bond (Giuliani 2003; Scannell & Gifford 2010; Manzo 2003). The attachment to a place is dynamic, can change and also stop (Giuliani 2003; Manzo 2003). Place attachment can have several different functions, as home, religious or cultural reasons (Giuliani 2003; Manzo 2003; Scannell & Gifford 2010). Research indicates that there is a multidimensionality in place attachment as the place level or function of attachment can have different and even opposing outcomes when perceiving a place (Manzo 2003; Scannell & Gifford 2010).

In general, person – place relationships are seen as dynamic phenomena (Manzo 2003; Morgan 2010). Various dialectic characters of these relationships exist, such as home/away, insiderness/outsiderness or rootedness/alienation (Manzo 2003). A dialectical dynamic provides changes in perspective and may therefore strengthen the meaning one ascribes to a place (Manzo 2003; Giuliani 2003). These dynamics can also be seen as a part of identity development (Twigger-Ross & Uzzel 1996; Manzo 2003). Place attachment seems to get stronger with age and the most influencing lifetime for attachment seems to be the years 6 – 11 (Morgan 2010; DelGiudice 2018). It is suggested that places may play a role as external emotional regulators to children, similarly to attachment figures in interpersonal attachment (Morgan 2010). A desire to remain in contact to a bonded place can happen physically, in mind or via symbols (Ainsworth 1982 see Giuliani 2003).

Other concepts in the study of person – place bonding are sense of place, place dependence, meaning of place, place/environmental identity and belonging (Giuliani 2003; Manzo 2003; Scannell & Gifford 2010). Tuan distinguishes between rootedness and sense of place (see Giuliani 2003), defining rootedness as a state of unself-consciousness and sense of place as active bonding with a place.

The description of these phenomena might overlap, depending on the author's definition. While some of them can be a part of place attachment, others are wider concepts and place-attachment is a part within them.

It is not known why people form an attachment to places (Giuliani 2003; Scannell & Gifford 2010). It is not a fundamental human need, as some people are not attached to places at all (Twigger-Ross & Uzzell 1996). Measurements of place attachment are still lacking (Giuliani 2003; Scannell & Gifford 2010).

Place relationship is influenced by external factors such as socio-political contexts and identities connected to these contexts (Manzo 2003). This identity can change over time and thereby cause changes in the (quality of) place attachment (ibid.). The bond to places influences humans' "representations, idealisations and expressions of life" as well as art, e.g. literature, and can influence both material and spiritual well-being (Giuliani 2003). Place attachment and belongingness for individuals or groups can include or rely on the exclusion of others. The attachment of discriminated or otherwise threatened groups or people can be connected to places which are designed as safe spaces or simply spaces not used by the dominant groups and people (ibid.).

A basis for place attachment is phenomenology which "[...]focuses on the meanings and experiences of places via a descriptive, qualitative discovery of things in their own terms" (Manzo 2003:48). Phenomenology sees human existence not only connected to place but this relationship as the essence of being, thus showing that several places can be important to a person.

1.4.1. The tripartite model of place attachment

For a long time, environmental psychology did not focus on the reasons for person-place bonds (Giuliani 2003; Scannell & Gifford 2010). Its existence was intuitively acknowledged but the process behind and reason for that phenomenon was either not kept into account or not involved in a model. This is why many different terms were used to refer to people – place interactions which kept the identification of that aspect quite vague and wide. For a long time, research was characterised by a large variety in the studies' design, focused aspects and models used, lacking a set definition of the concept (Giuliani 2003).

Scannell and Gifford (2010) developed the tripartite model of place attachment to unite the already existing models and show the multidimensionality of the phenomenon, as not only person(s) and place are important but also the bond's psychological process (Figure 1). The person dimension can occur on an individual or group level. These two qualities can overlap. The three model

components – place, person and process – are described in detail in the following sections.

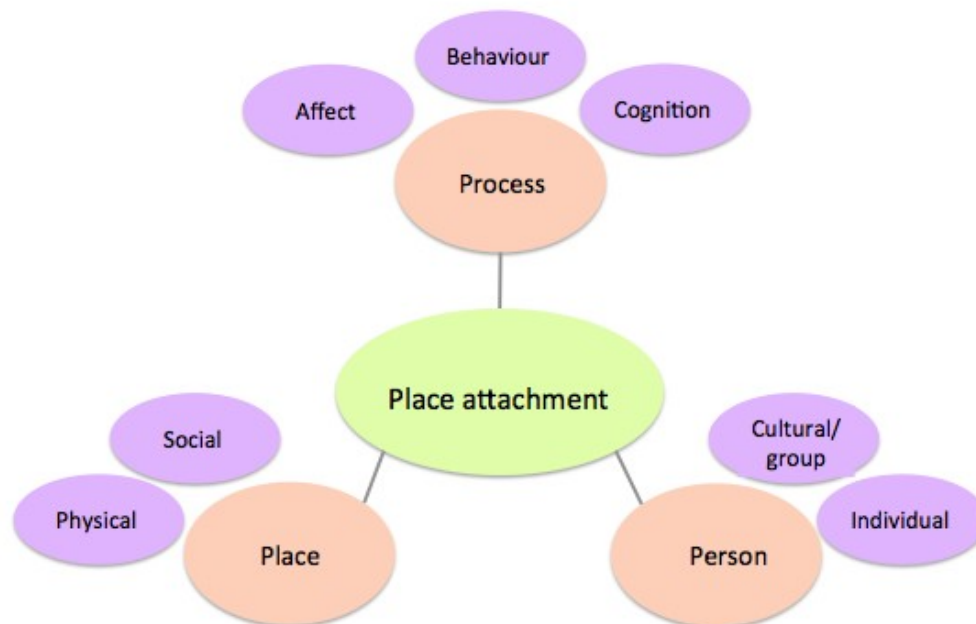


Figure 1: The tripartite model of place attachment (based on Scannell & Gifford 2010)

1.4.1.1. The place

Place, in comparison to space, has a character and a meaning, to individuals or groups (Giuliani 2003; Manzo 2003; Scannell & Gifford 2010; Lewicka 2011). Place has a value with an emotion connected to it (Manzo 2003). It also has a social level (Manzo 2003). Lewicka (2011) describes place as possessing “historical continuity, unique character, boundedness, and opportunity for rest” (p. 209), even though a place does not always have a positive meaning (Giuliani 2003; Manzo 2003; Scannell & Gifford 2010; Lewicka 2011). Morgan (2009) calls it a “subjective experience”. Attachment to a place is independent of time and can happen to past, current or future places, e.g. places we dream to live in (Giuliani 2003). It is not only connected to physically existing places but also to imaginary, spiritual or abstract ones.

The prototype of place originates from the idea of home resembling paradise or heaven in the Romantic period (Manzo 2003). Another important influence on today’s concept of home as a place is the concept of *Dasein* (Being-there) and dwelling by Heidegger, which he views as the individual’s existence connected with the world and its surroundings (Giuliani 2003; Manzo 2003). This also helps to distinguish between places and spaces (ibid). According to phenomenologists, the concept of dwelling includes the idea that not every place one lives at feels

like home. Home may simply be a place one has a strong bond to and a feeling of belonging and security, even while not currently living there. (Giuliani 2003; Manzo 2003). Home is used both as a metaphor, in an abstract way as in phenomenology, and literally. Therefore it is not always clear which level is meant, even though it is mostly interpreted literally (Manzo 2003). This leads to the idea of home as a mostly positive and secure place and this is often emphasised in the research of residence (ibid.).

While attachment is connected to physical places of all geographical levels, from the very local level of a specific spot in a house up to global level, the most regarded place attachment is the one to home or neighbourhood (Giuliani 2003; Scannell & Gifford 2010). Besides prevalent positive feelings, places where people frequently spend time in, as most places in their daily life, can show in their connected routines “the mundane aspects of daily life” and give a feeling of monotony and oppression (Manzo 2003:51). While most sacred places are perceived as special places by a religious or spiritual community, individual spiritual connections to places of personal importance can be formed as well (Scannell & Gifford 2010).

The level of attachment mostly differs between the geographical scales. For example, the level of neighbourhood can be less attaching than home or city level (Scannell & Gifford 2010). These bonds are also influenced by the social bonds linked to the places which can effect the level of “rootedness” a person experiences. “[... W]hen the attachment is directed toward others who live in the place rather than to aspects of the place itself, it is considered to be a socially based place bond” (Scannell & Gifford 2010:4). This can be connected to the aim of living among people similar to oneself, which is linked to the social status and therefore to the “distinctiveness” in place shaping, which is a cognitive process. Sometimes it is difficult to tell if people are attached to the place itself or if the place is “an arena for social interactions” and acts as a social symbol (Scannell & Gifford 2010: 5). Physical features that can cause place attachment can be built or natural environments or be parts of them, e.g. climate (Scannell & Gifford 2010). There are different levels of specificity, varying from attachment to a certain place as opposed to a general class of place, such as “the wilderness” or “urban environments” (Scannell & Gifford 2010). Thus, people attached to a specific place are less likely to go elsewhere, whereas those attached to a general kind of place are more focused on its overall characteristics, such as the offered services, and might feel similarly attached to a different place with similar qualities.

1.4.1.2. The person or group

Places influence both individuals and social groups. Experiencing bonds to places and being influenced by them in one's existence and identity (Twigger-Ross & Uzzell 1996; Giuliani 2003) does not only apply to individuals, but also entire groups (Scannell & Gifford 2010). Individuals often form bonds with places that carry a special meaning because of a personal memory and/or important experience (Twigger-Ross & Uzzell 1996; Manzo 2003; Scannell & Gifford 2010). Others state that the place's characteristics are also essential for place meaning (Scannell & Gifford 2010).

The feeling of community or identification of a group can be connected to a form of place or attachment to a place (Giuliani 2003; Manzo 2003; Scannell & Gifford 2010). Especially for groups, a symbolic meaning of a place, shared among the members, can evoke place attachment (Manzo 2003; Scannell & Gifford 2010). Place attachment can preserve cultures via a place bonded practice or shared historical experiences and values (Scannell & Gifford 2010). A community of place, where the social connections happen because of the geographical location, can be a reason for place attachment (ibid.). Examples for this are homes as connection to family and friends, workplaces to colleagues, religious places to fellow believers and so forth for neighbourhoods, villages/cities, regions or countries (Giuliani 2003). Place attachment was found in groups defined by culture, age, gender or religion (Scannell & Gifford 2010).

1.4.1.3. The process

The process of place attachment is about the quality and development of the people – place relationship. According to the tripartite model it consists of the components affect, behaviour and cognition (Scannell & Gifford 2010).

Place attachment and territorial behaviour can overlap. While place attachment behaviour includes social support and pilgrimage, the latter is influenced by ownership, access regulation and control of space (Altmann 1975 see Scannell & Gifford 2010). Territoriality can facilitate group bondings as a way of identity building (Giuliani 2003). This includes marking, aggression and territorial defence and is one reason for ethnic or religious conflicts, terror, racism and fascism (Giuliani 2003; Scannell & Gifford 2010).

Affect

In research, for a long time the feeling of affection set the mark on how to look at place attachment (Giuliani 2003, Manzo 2003). A confirmation that attachment can derive from affect is not only the positive emotions that were found in studies,

but also the negative ones, such as grief and sadness over losing a place (e.g. displacement) or the safe place becoming unsafe (e.g. natural catastrophes) (Giuliani 2003; Manzo 2003; Morgan 2010; Scannell & Gifford 2010). Research also found negative emotions towards places including ambivalence, fear and hatred (Scannell & Gifford 2010). Emotional connections to places are also described as place belongingness or “topophilia” – the love toward a place (Tuan 1974 see Scannell & Gifford 2010).

While affect may influence attachment, studies found that the level of attachment is comparatively unaffected by the length of residence (Giuliani 2003). This includes that the initial connection to a neighbourhood can have a strong influence on the perception of the neighbourhood. “Affective investment seems to be closely linked to neighbourhood quality, but also to previous experiences and compatibility with residential identity” (Giuliani 2003:152). Bonds can be formed by short but strong emotional experiences (Manzo 2003). At times of change, people are more likely to be aware of their feelings towards a place than usual, even at familiar places, where attachment is often subconsciously taken for granted (Manzo 2003). There are similarities in the quality of grief in losing a place and losing a beloved person (Giuliani 2003). A positive attachment to a place is connected with the feeling of security and protection, although this does not imply actual safety (Giuliani 2003). As in other processes, the attachment’s importance or intensity changes in the stages of life and can be influenced by other parameters, e.g. gender.

The meaning-mediated model (Stedman 2003 see Scannell & Gifford 2010) suggests that the reason why people bond with places are not the place features themselves but the meaning they represent. Giuliani (2003) mentions that it is difficult to differentiate between affective bonds to a place and the social relationships that might also be connected to a place.

Behaviour

The behavioural aspect of place attachment is expressed by actions (Giuliani 2003; Scannell & Gifford 2010). One of the most common behaviours of place attachment are the length of stay and the aspiration to (re)visit. Being absent from and returning to a place strengthens a person’s attachment to it, as they become more aware of the place’s characteristics (Scannell & Gifford 2010). Another typical behaviour regarding place attachment is to rebuild or model a familiar place (ibid.).

A negative result of attachment behaviour to places can be that the attachment is so strong that people do not leave places in cases of danger, such as fire or other catastrophes (Giuliani 2003; Scannell & Gifford 2010). Less dramatic negative impacts can be missed opportunities, e.g. moving for a job (Scannell & Gifford 2010).

Cognition

Place attachment is created through cognitive elements: memories, beliefs, knowledge and meaning (Scannell & Gifford 2010). These elements are especially important when it comes to the connection to historical or sacred places.

Another reason why cognition influences place attachment is the concept of schemata, which are a way of processing and using information. Schemata can show familiarity in places and are probably linked to place categories and “generic place dependence” (Stokols & Shumaker 1981 see Scannell & Gifford 2010). Other concepts similar to cognitive place attachment are place identity and place-related distinctiveness, which are self-definitions connected to places or derived out of place attachments (Twigger-Ross & Uzzell 1996, Scannell & Gifford 2010). Examples of this are self-descriptions connected to a certain place or a kind of region (city people, country people) or the aiming for a noticeable connectedness, mostly visual, to the neighbourhood.

Memories from childhood may strongly influence an adult’s place attachment (Morgan 2010, Giuliani 2003). Strong positive affective environmental bonds seem to be mostly created towards environments experienced in childhood and less often to ones only experienced in adulthood (Giuliani 2003). Negative place experiences in childhood can have negative consequences towards general place attachment in adult life. Childhood memory does not only affect the physical place attachment of adults, even if they moved to other places, but can also resume in reflecting on the memories (ibid.).

1.4.2. Functions of place attachment

Depending on the places and their functions for individuals or groups, the forms, symbols or actions of attachment vary, because they satisfy different needs.

1.4.2.1. Basic life support as survival, safety and refuge

To know a place means to know where to find food, shelter and similarly important services (Scannell & Gifford 2010). This happens via the cognitive bond, usually on an individual level. Knowing a place and feeling security gives confidence and may lead to exploration. When feeling in danger, people might cling on to the place and not dare to leave. Bonds to safe places might be stronger among vulnerable people. A person may only perceive a place of refuge so positively, because they have had negative experiences in other places (Manzo 2003).

1.4.2.2. Goal support and self-regulation

Sometimes, certain goals are ascribed to a certain place, e.g. seeking calmness and recreation (Manzo 2003). Places may help to achieve these goals, if the goals are connected to its social or physical dimensions (Scannell & Gifford 2010). The cognitive process in goal support is connected to the memory of previous place usage; the behaviour of goal support is expressed by repeated visits to the place (Manzo 2003; Scannell & Gifford 2010). In this case, place dependence can occur because of the services the place offers (Scannell & Gifford 2010). Self-regulation supports goal achievement. As place attachment can regulate emotions and help reduce stress, places can help to support one's goal (Manzo 2003; Scannell & Gifford 2010). Twigger-Ross and Uzzell (1996) describe that a "manageable environment", where people are able to achieve their goals, support a person's feeling of self-efficacy.

1.4.2.3. Continuity

Continuity is a cognitively based attempt which is connected to self-continuity (Scannell & Gifford 2010). Place attachment can occur when a place is congruent to one's self-concept, comprised of personal values and representation (Twigger-Ross & Uzzell 1996; Scannell & Gifford 2010). Places can be linked to one's own identity, as they refer to past selves, experiences and actions (Twigger-Ross & Uzzell 1996). The reported feelings of grief or loss upon involuntary relocations or loss of places is connected to the loss of the function of place continuity. Place-congruent continuity are connected to features of the place which are aligned with a person's desires and values (Twigger-Ross & Uzzell 1996). It can involve previous experiences from other places which do not need to be connected with the place itself. An example is that the place fits a certain preferred kind of landscape or scenery. Place-referent continuity is connected to one's personal history (meaning a longer time of contact) with the place (Twigger-Ross & Uzzell 1996). The opposite behaviour is "conscious discontinuity", where people move

to places which better fit their sense of self or move away from a place that does not represent them anymore (Manzo 2003, Twigger-Ross & Uzzell 1996). Continuity may also occur, when a connection to a place is formed because of memories or symbolic meaningfulness (Scannell & Gifford 2010). This can happen on an individual as well as on a group level, e.g. religious or cultural groups.

1.4.2.4. Other functions

Other functions of place attachment are sense of belongingness (Giuliani 2003), place friendship by children, enhancement of identity and support of self-esteem (Twigger-Ross & Uzzell 1996; Scannell & Gifford 2010). Enhancement of identity and support of self-esteem can occur through private places as safe havens or pride to live in/be connected to certain places. Another function is distinctiveness: place identification is an attachment to a place, allowing the individual or a group to distinguish themselves from outsiders (Twigger-Ross & Uzzell 1996). Attachment to natural environments and wilderness can be defined as ecological stewardship (Manzo 2003).

1.5. Aim and research question

The overall aim of this thesis is to study what role urban green community projects have for individuals and community, in a German context. In order to analyse the role of gardening projects in German cities, I pose the following research question:

- Which role do urban gardening projects have in the participants' lives?
- What qualities do the projects contain and how are they used?
- What is the social life and organisation of the site?
- What is the participants relationship to the place and its services?

2. Methods

2.1. Study design

2.1.1. Multiple case study

As there are several differences between the garden projects' structures, a multiple-case study approach was chosen to be able to look at the different structures (Creswell 2007; Johansson 2007; Yin 2014).

Depending on research focus and different situations, what constitutes a case is only loosely defined (Creswell 2007; Johansson 2007; Yin 2014). "The case might be a relatively bounded object or a process; it may be theoretical, empirical, or both [...]. At a minimum, a case is a phenomenon specific to time and space" (Johansson 2007:50). Both boundaries of and focus on a case might change during the time of study. Even though researchers do not agree in every detail what exactly defines a case study or a case, they do have some common statements: a multiple case study explores an issue in several defined units (the cases) in a certain, contemporary, timeframe with the help of multiple methods and data sources (Creswell 2007; Johansson 2007; Yin 2014).

There are two reasons for choosing a case (for a single case study): an intrinsic interest in a case without an attempt of result generalisation or a purposefully chosen case which implies an interest in generalising the results. The generalisation in such a situation is not by a statistical quality but by an analytical (Creswell 2007, Johansson 2007, Yin 2014). The intrinsic case study focusses on the case itself and is used for "unusual or unique" cases (Creswell 2007).

In multiple instrumental case studies cases are selected when they fit the chosen topic of research. While Johansson (2007) says that these cases can be unique, Creswell (2007) aims for representative examples in such a setting. In a multiple case study cases are often chosen to provide different angles on the topic.

Cases for generalisation are chosen either if it is assumed that they are likely to confirm a theory or if they can generate enough data to establish a new concept or theory based on in-case results (Creswell 2007; Johansson 2007; Yin 2014). There are two further possibilities for analytical generalisation: either a case is constructed by several facts or it is a naturalistic generalisation, where “generalisations are made from known cases and applied to an actual problem situation by making appropriate comparisons” (Johansson 2007:53). All these approaches can be combined in case studies.

Analysis is either holistic (the entire case) or embedded (specific aspects of the case). Themes are worked out to focus on the most important topics. A within-case analysis is often followed by a cross-case analysis in multiple case studies. In the final stage an assertion is made, the meaning of the case(s) is described and the “lesson learned” is stated (Creswell 2007; Yin 2014).

2.1.2. Selection of cases

After I began with my thesis, the COVID 19-pandemic started. The strictest part of the first lockdown in Germany started March 22nd 2020 (Presse- und Informationsamt der Bundesregierung 2020). Many rules were active up to May 6th 2020, strict contact restrictions until June 5th 2020 (tagesschau 2020; ZDF 2020). Individual rules were added by the different federate states (SWR aktuell 2020, ZDF 2020). These were the most important rules:

- Keeping a distance of at least 1,5m to persons from other households
- Meetings with other households were only allowed in public and with only one other person at first. This partly changed in May when several persons of two households were able to meet, in public and private
- All cultural and educational institutions (special rules applied for kindergartens), libraries, sport and leisure places including play grounds, most shops, gastronomy and hotels were closed, this partly changed in May

These rules influenced the study design as well as the technical aspects of the case visits, which took place at the end of May/beginning of June 2020. They had a huge influence on the general public, thereby also on the interviewees and other garden participants. I resided in the countryside, the nearest cities were Trier and Koblenz.

An online search for suitable projects was concluded, first in Trier, then in Koblenz. All allotment clubs in Trier are listed online (Stadtverband Trier der

Kleingärtner n.d.). I contacted those with a website to be able to prepare for the visit. It proved more difficult to find other types of gardening projects and to decide if they were suitable for the study, based on their online presentation (own websites, social media accounts, newspaper articles or information by the municipalities). In the end, a well-connected garden expert in Trier enabled me to get in touch with suitable projects.

In week 20 in 2020, I researched suitable projects and wrote to seven of them in the city of Trier (four allotment clubs, one community garden, one environmental club, one group which promotes an edible city) (Table 1, Table 2). I received two answers, one declined to work with me. After contacting the Trier garden expert I was able to contact three more projects in week 22, two community gardens and one community garden/CSA group. In week 23 I wrote to two more initiatives, in the city of Koblenz, since I had not gotten any more answers until then. After contacting the last projects, I received positive answers from the second round and needed to decline the community garden that replied the last, as I got enough participating projects already.

The following four projects were finally chosen: one typical allotment garden club, one community garden started by a parish in a church yard, one intercultural community garden and one project that combines community garden with Community Supported Agriculture (CSA).

Table 1. Overview on date of contacts and answers

Date of first contact	Number of projects contacted	Positive answers	Negative answers	No answer
2020-05-18	7	1	1	5
2020-05-27	3	3	0	0
2020-06-02	2	1	0	1

Table 2. Overview on the number of contacts per project type

Project type	Number of contacts
Allotment club	4
Community garden	5
Environmental club	1
Edible city activity	1
Community garden/CSA	1

It remained unclear of those projects that did not reply still existed at all. Judging from the negative answer and one answer that the project had temporarily halted their weekly open meetings, the hesitation might also depend on internal arrangements and official guidelines for physical distancing.

2.2. Qualitative data collection

2.2.1. Data sources

The chosen data sources are written information material such as social media sites, websites, newspaper articles and flyers, on-site observation, participant observation, note taking, photographs, on-site interaction, maps, contact via e-mail and phone and recorded semi-structured qualitative research interviews. Sources for the theoretical foundation of this thesis come from course literature, tips from supervisors and key word searches in “Web of Science” and the SLU library.

The pictures were taken either with an iPhone SE smartphone or a Panasonic Lumix DMC-FZ38 camera. I used an Olympus Linear PCM Recorder LS-5 for the interviews.

2.2.2. Observation and interview situation

I conducted a test interview with a gardener on May 22nd 2020, in order to test the recording quality in an outdoor situation with a distance of at least 1,5m between the interviewer and the interviewee, which was the situation in the field under the precautionary measures due to SARS-CoV-2. It was also a test for the interview questions, which got partly changed and improved after the test interview.

The place visits and interviews took place in week 23 and 24 of 2020, one day per project.

I conducted one semi-open interview per project about place attachment with one person that lasted 20 to 40 minutes (for the German questionnaire see Appendix 1). The questionnaire consists of 13 questions. Its design is based on Noelle-Neumann and Petersen (2005), Porst (2008), Jacob et al. (2011) and Brinkmann and Kvale (2018). The structure of the questionnaire is divided into introduction and a main part. Introductory questions concern the distance to the interviewee’s residence, duration of their residence at their current place, means of transportation to the garden, duration and character of the travel and since when

they have been active in the project. The first part of the main questions deal with their activities in the project and their views on the space, if they prefer certain places or if they would like to change anything, either about the place itself or the project as a whole. The next block of questions asks about their connection to the place and its importance in their lives, e.g. how they would feel if they needed to stop visiting the project and what comes to mind when thinking about the place and project. The last segment is about their relationship to the garden and the project and what these mean to them. The very last question investigates how, if at all, their connection to the garden/project changed when the severe pandemic restrictions became effective.

All interviews happened on site and outdoors, except one indoor due to bad weather. In two projects I had contact with the interviewees beforehand. In the other two projects I initially met the whole group and it was decided spontaneously who would be interviewed. At these two group gatherings, I met one group at an internal activity I was invited to join, and the other group met specifically to introduce me to their garden.

On three occasions other group members or acquaintances of the interviewee were present and listened in at least temporarily. This was in accordance with the wishes of the interviewees. The people were around either because of their usual undertakings, unaware of the ongoing interview, or they knew about the interview and were curious or invited by the interviewee to attend. Some of the interviewees had experiences being interviewed by journalists (partly in connection to the project) or were journalists themselves. At every project I spoke with several members about the project's background, the character of their personal participation and were taken on a guided tour by at least one member. During the tour or shortly before or after, I asked general questions about the project (Questionnaire see Appendix 2).

At every site I conducted observations and took pictures. In two projects I was involved in activities (harvesting, preparing plant beds and sharing lunch in one project and having a barbecue, including common food preparation, in another project). Being involved gave me the opportunity to chat longer and more casually with people other than the interviewee, to get a better insight into their working habits and group structure and how they interact with each other.

The interviews were conducted in German and all quotes were translated by me. In some cases, the original German wording is stated in the quotes or a short description is given for context. A broad transcription was used, documenting pauses, laughs and word-for-word transcription. The transcription was done after finalising all interviews.

All information used in the project descriptions and analysis comes from the interviews, chats and my observations unless stated otherwise.

2.3. Qualitative data analysis

The interviews were analysed according to the six phases of thematic analysis defined by Braun and Clarke (2006) (Table 3).

Table 3. Six phases of thematic analysis (Braun & Clarke 2006)

Phase I: Familiarizing yourself with your data	<ul style="list-style-type: none"> • Searching for patterns and meanings while reading the material
Phase II: Generating initial codes	<ul style="list-style-type: none"> • Codes are the most basic analysis element • Codes organise data into meaningful groups
Phase III: Searching for themes	<ul style="list-style-type: none"> • Themes can contain several codes
Phase IV: Reviewing themes	<ul style="list-style-type: none"> • Level 1 review: extracting data → Are they coherent in a theme? • Level 2 review: Are the individual themes valid in relation to the data set? Do the combined themes reflect the meaning of the data set? • If not: re-reading the data and re-coding
Phase V: Defining and naming themes	<ul style="list-style-type: none"> • Themes should identify the essence, not be too broad, fit the overall story • There should be not too much overlap between the themes • Precise naming
Phase VI: Producing the report	<ul style="list-style-type: none"> • Arguments should be in relation to research question(s)

As the interviews and transcription are in German, the original coding and theming was conducted in German, too. The material was analysed for codes and themes in two rounds. During the first round I read the interviews two to three times. Preliminary codes were identified intuitively while reading and were not set up beforehand. After bringing together the codes, themes were created according to the tripartite model by Scannell and Gifford (2010). The initial fragmentation did not adequately cover the tenor of the interviews, as there were overlaps in meaning and some of the information was not optimally validated. When I read

the interviews for the second round (Phase IV according to Braun & Clarke 2006), the themes or at least their definition partly changed, as the codes changed. In round two, as I was aware of the themes' flaws, I decided first on the themes (Table 4) and then sorted the interviews' codes into the themes. As the coding occurred intuitively, sometimes several terms were used to describe the same topic, e.g. "meditating", "relaxation" and "refuge". I grouped these congruent codes into one. The terms "meditating", "relaxation" and "refuge" were included in the final code of "*Bedeutung*" (personal relevance and meaning of place/project).

Table 4. The final themes for the thematic analysis

Final themes	Description	Sample quotes
Individual level	Concerns the interviewee and their living conditions, personal background, character and opinions	"Because I live so close, sometimes I go [to the garden] while cooking, to see if there is [for example] some parsley, if I have none left."
Group level	Concerns the group, e.g. its structure, ways of organising, behaviour in the group, acting as group	"[...] there is a difference if you sit together and drink coffee or if you work together. There can evolve talks that would not happen otherwise."
Place level	Connected to the physical place, its design and use	"This is a nice place, also for meditating. Because you sit very sheltered. And it is public at the same time. But you sit very sheltered."
Higher level	Concerns the interviewee's world view, with regard to their activity in the project, e.g. solidarity in society, but also bigger contexts they participate in by choice but cannot change themselves, such as the German Federal Allotment Garden Law	"The connectedness with nature... with life... You see how it grows and how it withers. Well, not everything succeeds all the time, and that's a good thing. That is... it brings you back to the ground... you become aware of so much: transience (<i>Vergänglichkeit</i>)... and life, everything close together."

The results of the other data sources were added to the structure that was inspired by the interviews.

2.4. Ethical Considerations

The basis for research including humans is to safeguard the participant's interests and safety (Creswell 2007; DePoy & Gitlin 2016). Therefore three principles are important: full disclosure, confidentiality and voluntary participation.

Full disclosure means, that the researcher informs the participants thoroughly about how they will be involved in the research, the general research topic, the setting(s) and the processing of their data, including possible risks (Creswell 2007; DePoy & Gitlin 2016). It is not necessary to inform the participants about the actual study aim, working questions or hypotheses, as this might influence their behaviour or the information they give (ibid.).

The confidentiality agreement tells a study participant that their personal data will only be used within the research purpose stated and not be shared with unauthorized persons (Creswell 2007, DePoy & Gitlin 2016). It also is about anonymisation, so that it is not possible infer their identity through the published data. They should be fully anonymised in all related publications.

All participation must be voluntary (Creswell 2007; DePoy & Gitlin 2016). Participants are free to change their mind and withdraw from an ongoing study, to deny answering specific questions or to participate in specific activities at any time.

While designing my study and searching for projects and involved individuals, I kept these three principles in mind. My version of an internal review board proposal (also mentioned by Creswell 2007; DePoy & Gitlin 2016) consisted of discussions with both of my supervisors about my study design. These included a description of my handling of the involved individuals, especially the interviewees. Anna Litsmark reviewed an English translation of my declaration of consent which is originally in German (Appendix 3). Information about my study was presented in the first email I sent to all projects, I explained it again when I met the interviewees and let them sign the declaration of consent. The declaration of consent includes confirmation that all transcripts are anonymised and that all audio files will be deleted upon completion of this thesis.

When I visited the projects, I introduced myself to either the group or to the individuals I spoke to. A few, sometimes all project members were informed about a visiting researcher beforehand by my respective contact person. I was welcomed warmly. People, both the interviewees as well as others, spoke openly with me and showed interest in my work. Nobody refused to answer any of the questions.

To be able to guarantee the interviewees anonymity, I asked as few personal questions as my research questions permitted. This included questions about age, socio-economic status and, if I did not know it already before, the person's name.

2.5. Methodological reflections

The fact that the time of my case visits corresponded with the first pandemic lockdown in 2020, when I was located in the countryside, meant that I was not able to visit each project more than once. Due to my place of residence¹, travelling to these places was effortful, the pandemic restrictions advised against public transportation, which I relied upon, and the restrictions also influenced the interactions within the projects.

I had no influence on who the interviewees were in the projects, because the projects decided this themselves. In my first e-mail I asked for an interview with "somebody from the club", "a gardener" or "a volunteer", as I wanted to stress my desire to not only interview members of the inner team, if one existed. Specific and project related circumstances decided who finally became the interviewee. Such circumstances included the amount of time the potential interviewee had for me and their willingness to talk. Judging from the interview content, my observations on the sites and the talks I had with other people in the projects, I gained the impression that all interviewees were good representatives of the entirety of people engaged in the respective projects and that that they also constituted a good variety of engaged people in urban green volunteer projects. Since two interviewees were retired, this user group might be overrepresented, while others, e.g. volunteers with young families are not included. However, owed to the circumstances, it proved impossible to purposely compile a sample of interviewees representative of all socio-economic aspects. As there were additional persons present during three of the interviews, this may have influenced the answers. It may be assumed that only individuals with a strong and positive relationship to the project were considered – either by themselves or the community – fruitful interviewees.

Altogether my choice of methodology and methods proved to be the right decision, as I gained a sufficient amount of useful data within the planned time frame. However, if this study were to be repeated, I would chose to try to find more information about the interviewees beforehand. And while I am glad that I could study all four cases, for the thesis' sake it could have been fewer. On the

¹I was in the rural village "by accident" at the time of the case visits, because I travelled to my parents in March 2020, when it was unclear how the pandemic will evolve, and stayed there much longer than expected.

other hand, I might not have been able to visit fewer projects more often under the given circumstances.

2.6. Limitations of thesis

This thesis looks at place attachment to urban allotment and community gardens in Germany. When it comes to the social network, only allotment gardens that are organised in the Federal Club of German Allotment Gardeners are taken into consideration, not individual ones. The study findings are not statistically generalisable, as the study was conducted qualitatively and not quantitatively. The dimension of process in the tripartite model of place attachment was not taken into focus.

Urban green community projects are important places for biodiversity, soil, local climate and such in cities but these arguments are not taken into consideration in this thesis.

3. Results

3.1. Garden initiatives and the participant's place relationship

The four cases are located in the German cities Trier and Koblenz (Figure 2, Figure 2).

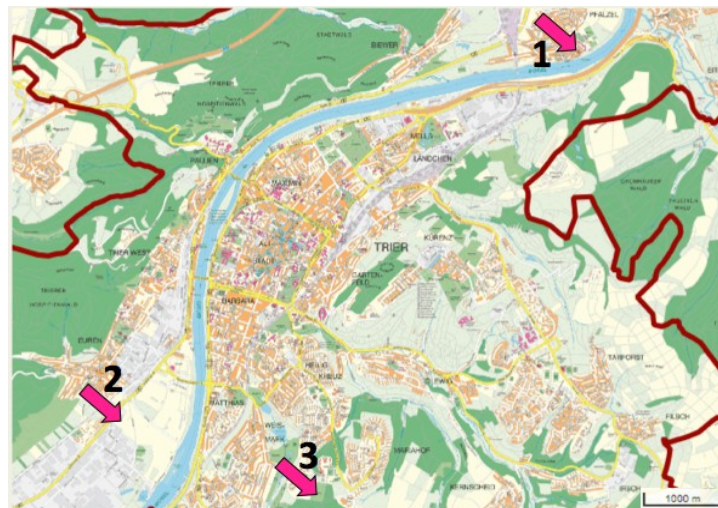


Figure 2: Projects' locations in Trier: 1. Church garden, 2. CSA garden, 3. allotment garden. Stadt Trier (2020) / dl-de/by2-0, www.trier.de; GeoBasis-DE / LVermGeoRP2020, dl-de/by-2-0, www.lvermgeo.rlp.de; openstreetmap.org contributors, opendatacommons.org, edited data



Figure 3: Location of the Intercultural community garden in Koblenz. GeoPortal Koblenz (2021), edited data

3.1.1. The allotment club

The allotment club “Kleingartenverein Trier Mariahof e.V.” is located on a hill side in the south east of Trier (Figure 4).



Figure 4. View from the allotment club over Trier and the area

The allotment club was established on the hill in 1965. It was located in the valley earlier, but needed to move when the initial location was transformed into an industrial area. The club has 88 parcels and is placed on former agricultural land.

The club is surrounded by several schools, a tennis club, a forest designated as recreational area and agricultural fields (Figure 5). It can be reached by bus. The

living quarters of the borough are located on the hill top shortly above the site. As the allotment club is located on the hill side, it has a view over the city and the Mosel valley.

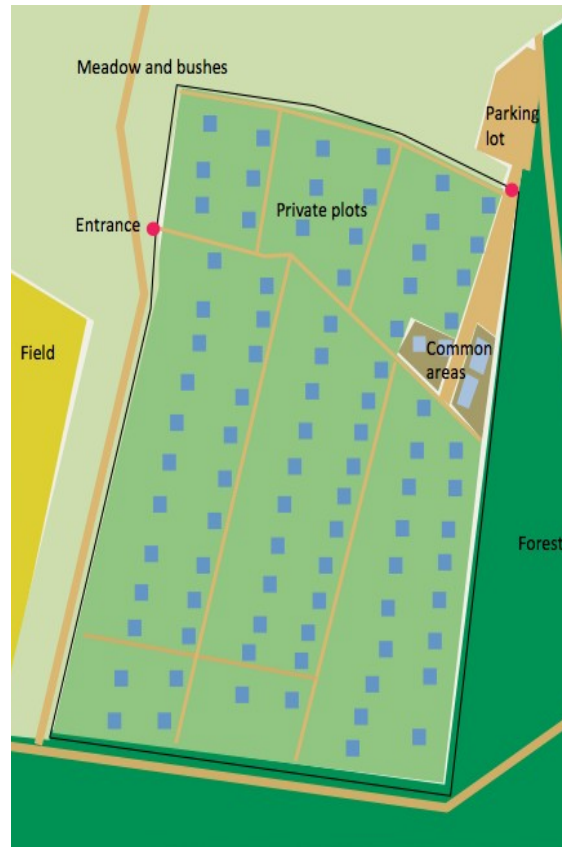


Figure 5. Map of the allotment club, not true to scale. Based on Google; GeoBasis-DE/BKG; GeoContent; Maxar Technologies; Kartendaten (2020); GeoBasis-DE/BKG (2009)

3.1.1.1. Place and usage

All huts in the allotment club were built at the same time and the same design, each with 24m². The parcel's size is 400m². The design of the parcels is defined by the Federal Allotment Garden Law and the rules of the allotment garden clubs in Trier, which regulates that 1/3 of the space is used for leisure (which mostly means lawn), 1/3 for fruits and vegetables and 1/3 for paths, hut, patio and shed (Figure 6, Figure 7). The land is leased by the municipality to the club, which in turn leases individual plots to the members. The contracts are open-ended and new members must pay former owners for the property value.



Figure 6: View from the cultivation part of a parcel to hut (behind the cherry tree), green house and lawn



Figure 7: Typical allotment hut in the club

The common grounds include a fairground, which is used for barbecues, has two beer stalls and a shelter. Next to them is the insect hotel that was communally built (Figure 8). Opposite of the fair ground is the club house (Figure 9). The tool shed was sprayed with paintings in collaboration by a youth summer activity organised by the municipality (Figure 10).



Figure 8. The fairground opposite to the club house with beer stands and insect hotel



Figure 9. The club house of the allotment club



Figure 10. The common tool shed which was painted by a youth activity group

The club has put a focus on insect and environmental friendly designed common spaces for some years. Reasons for this include the desire for a more sustainable and environmental friendly ground and to provide attractive activities for the club members. Bee hives belonging to a bee keeper are located at the site and the honey can be bought. They planted trees typical for the region, e.g. local apple varieties, walnut, quince and red vineyard peach. Vandalism is very unusual and so far no serious damage or thefts have occurred.

Not all members are able to or interested in maintaining the mandatory amount of vegetable and flower beds and prefer to have a lawn. Common reasons for this is either high age or time restrictions. Even though the board is understanding to a certain degree, it is an ongoing discussion due to legal aspects.

Two qualities of green space can be found in the allotment club: the individual garden and the common grounds. While individual gardens have to follow certain rules, individualisation is possible. The huts and gardens show the diverse individual preferences of the members as the rules leave much room for personal design alternatives.

3.1.1.2. Group structure and social activities

As the project is a registered club, it has an association's board. There are 12 allotment clubs in Trier, which are organised as an association at city level and maintain an active exchange. The renters are mostly elderly couples, however, due to demographic changes over the last few years, more young families with children now rent parcels as well. Of the old aged members, many are widowed women. The mean age is 40-45 years according to the interviewee. 30 parcels belong to parties with migration background, mostly Russia Germans² and from Eastern European states. The occupational background is diverse. Most members are from neighbouring quarters. The board has the option to choose new members, when a plot is vacant and try to find people who fit into the community. Every parcel needs to do some hours of ground maintenance per year or pay a fee.

The club offers regular social activities and publishes information about them on their webpage (Kleingärtnerverein Trier Mariahof e.V. 2020). Every Sunday, members are invited to attend a regular's table (*Frühschoppen*³) in the club house. The club house is also used for wine tastings, a regular veteran meeting and private arrangements. In October 2018 an annual fruit press and juice making day

² Russia Germans is a general term of Germans and their descendants in Russia and other former Soviet Union states as well as Germans in the Baltic countries. Many of them went back to (Western-)Germany since the 1970s (Wikipedia n.d.)

³A Frühschoppen is a common tradition in Germany. It can be hold in the morning of local fairs or as a jour fixe on a regular basis for a more or less defined group of people. By its style it is similar to regular's tables.

was established. In 2019, the fruit pressing took place in cooperation with the municipality and a garden expert. They want to continue and extend this cooperation with the expert. Once a year, they organise a one day trip to regional garden shows, parks or similar places. The season kicks off with a barbecue in spring, a summer party takes place in August and a small St. Nicholas celebration is held in November, which is especially for the children.

The active club life with Frühschoppen, seasonal and annual traditions is seen as a successful strategy to shape and maintain an active overall community. This should prevent the trend of smaller group formations, which occurs because the intensity of the social contacts have has weakened over the years. The connectedness among neighbours depends on their general interest in the community and the location of their parcels. Often, parcel neighbours form closer bonds and thus loose groups exist within the allotment club. Several of the native German members perceive it as problematic and feel provoked when people with an immigration background use their native language amongst each other. Members who are not active in the club activities use their parcels as meeting places for their family or friends. Smaller group buildings and ageing members are seen as main reasons for the weakened social cohesion. Another reason is the shifting usage of the parcels toward being places for personal recreation. This might result out of the club's preferences for families as new members instead of (young) people, who have an interest in gardening, but no experiences. The interviewee stated that many of the young families focus more on recreation than on gardening.

Due to Corona all community activities were cancelled for 2020 at the time of the visit, but the club planned to arrange some for a later time, depending on the circumstances. The meetings of the association's board could not take place as usual. In spring 2020 several TV and radio journalists visited the site to report about having a garden in the city during a lockdown. The club received many more requests for vacant plots than before.

3.1.1.3. The interviewee's relationship to the place

The interviewee has known the place since his childhood, as his family owned agricultural land in the same location. He has lived 1km away for the past eleven years and has rented a plot in the allotment club since 2011. He and his late wife moved from a house with a garden to a flat with a balcony. As the balcony was too small, they looked for an allotment plot. This club was their favourite, because it is nearby and his childhood connection. Soon after they joined the club he became a board member. He describes himself as "always earthbound" (*immer*

erdverbunden) with the place. His private garden is “an island of bliss” for him. Gardening and relaxation are equally important to the interviewee.

He spends nearly his whole time in the allotment club. The gardening, spending time on his personal plot and doing communal work for the club are important factors in his attachment to place and project. He states that it fits his character. It gives balance and satisfaction to his life and gives him orientation and stability.

“I like to be here and I like to do the work. None of the works here is too much to me, I would say. And without it, I don’t know. I couldn’t run around in my flat at home, I would be like an animal in a cage.”

Maintaining the contact with the fellow club members is important to him. Group structure and how members behave towards each other is of central interest in his activities. He negotiates in conflicts and works to find a good solution for everyone involved. The interviewee has a strong and long lasting connection to institutionalised forms of solidarity, responsibility and community. This shows not only in his current work for the board, but also in his previous occupation in public service. He describes general association works (*Vereinsarbeit*⁴) as his “favourite occupation”.

It is important for him to keep the common spaces well maintained and presentable. He is proud of the grounds and the club and likes to show it to visitors.

“Well, the grounds definitely have flair. By themselves and due to their location. I think there is no other allotment club in Trier with such a view – up to Luxembourg when the weather is good.”

While he stated that he had not particularly noticed changes due to the “Corona crisis” in his own life, he still listed the restrictions that influenced him: Regular coffee meetings with members from the other local allotment clubs had been cancelled, as well as all club events and board meetings. He was able to process the daily news about the pandemic as he could focus on the garden work. The interviewee described the importance of having the garden as a sanctuary, where he could be active and outside and did not need to “[sit] on the couch at home or with only so much as a balcony”.

⁴Being active in a club or association is very common in Germany, the term “*Vereinsarbeit*” is a commonly used word. Its purpose and grade of identification for the involved is an integral part of German culture, which has few adequately similar international counterparts.

3.1.2. The intercultural community garden

The intercultural community garden “ZusammenWachsen” (*Growing together*) in Koblenz developed out of workshops and meetings for refugees organised by the local office of the Arbeiterwohlfahrt (AWO), the German Worker’s Welfare Association. In 2016 the AWO initiated the position of a refugee and volunteer coordinator. They started with offering pottery courses for refugees and volunteers to get to know each other. After a while they widened their focus to include former guest workers and their families as well. A steady group formed and the idea of a community garden came up in winter 2016/17. In July 2017 they received the land by the municipality.

3.1.2.1. Place and usage

The garden is located in the city centre near the shore where the Mosel joins the Rhine. This area is an inundation area outside the flood wall and will not be used for development. The ground is defined as “Grabeland” by the Federal Law of Allotment Gardens (Bundesministerium der Justiz und für Verbraucherschutz 1983). This means that the users are only allowed to plant annual plants. Even though this land use is part of the law for allotment gardens, “Grabeland” is not a part of allotment gardens. The lease agreement with the municipality gets renewed annually. The space was abandoned for several years and overgrown with blackberries and bushes. As it was a garden before, some paths and bed edgings still existed. They are not allowed to install electricity on the property, which is why they manually pump water to fill the pond and to water the plants. The trees on the property are maintained by the municipality. A hut, a tool shed, the pond and some rose bushes were left over by a previous user and are allowed to stay on the property (Figure 11). One of the neighbouring sites is not in use and overgrown with bushes and trees. There is a private garden on the other side, which they share the water with and a football field behind the garden. They are in contact with the sport club’s chairwoman on a political level, because she is a politician active in the city’s Board of Migration and Integration.

The site is part of the ongoing urban development project “Zukunft Stadtgrün Lützel” (Future urban green Lützel). Lützel is the city district. The area is going to be a space for families and leisure, including green spaces, toilets and sport areas. While some of today’s gardens and sites, including the sport field, will be destroyed for this, the intercultural garden will likely grow from 600m² to at least 1000m² and they are promised a water connection (status as of spring 2020).

The group learned gardening from a now deceased member, books and learning-by-doing. They became more confident over time and started to try out things

based on observations. At least one of them already had a garden when joining the group. After they started participating in the community garden, some participants also began gardening in the private gardens of friends or started (small) gardens for themselves, which they maintain in addition to the community garden.



Figure 11. Map of the intercultural garden, not true to scale. Based on Google, GeoBasis-DE/BKG; GeoContent; Landsat / Copernicus; Maxar Technologies; Kartendaten (2020); GeboBasis-DE/BKG (2009)

After the first two seasons they changed their technique from planting directly in the ground to raised beds. They grow plants like melons in a small plastic greenhouse (Figure 13). The raised beds are used for vegetables. They grow some varieties from countries they have connections to, e.g. pepper from turkey. Berry bushes such as blueberries, red currants and raspberries were planted, and in between they grow garden strawberries and wild strawberries (Figure 12). They also built a herb bed and a herb spiral. The spiral was built together with the now deceased gardener and is a memory to him. Some of the pottery artworks made in the first workshops stand in the herb bed, as decoration and in memory. The plants thrive well in the warm climate of Koblenz. The group tries to work with the principles of intercropping and crop rotation. They are very satisfied and proud of their achievements so far. The whole garden is used as commons. All new installations, perennials and bushes in the ground seem to be either legal under the law of land use or at least tolerated by the municipality.

The garden also contains three huts, a pond, a fireplace and a sitting area. One hut contains the kitchen, one is being restored and one is the tool shed. The pond serves as a water reservoir for the pumped water and is an important spot for the

local fauna, such as birds, insects and newts (Figure 14). The animals are important to the group and they are proud that newts live in the pond.



Figure 12. A part of the garden seen from near the entrance. On the right are the berry bushes at the fence, in the end of the line is the trial bed. A bed of roses, pepper and the little green house is on the left side, next to the path. In the back is the hut



Figure 13. Some of the raised beds and the green house. In the background is the neighbouring garden, which they supply with water from their pump



Figure 14. The pond, in the background the garden huts

3.1.2.2. Group structure and social activities

The core group in the garden consists of approximately 10 people with migration background, refugees and Germans without migrant background. They meet in a loose six week rhythm in the season and hold a planning meeting in winter to organise a planting plan, watering, general maintenance and other projects, e.g. renovating the hut, cleaning out the tool shed or organising social events. Besides the core group, also some regulars know the codes for the combination lock at the garden gate. They can enter the garden at any time. A WhatsApp group is used for internal communication. The regulars are between 20 and 65 years old and stem from at least eight nations. More women than men are part of the inner team. A low level of participant fluctuation exists, mostly due to the people's living conditions (job changes, moves etc). Many of them come as irregular visitors for the sake of social contacts. The group was always sufficiently large enough to function. Many of the participants in the garden engage in local politics and/or community work and are members of the AWO, political parties or other projects.

Even though they do not engage in public relations the garden receives much attention, which they explain with the ongoing zeitgeist. In the beginning they were afraid of right winged attacks and therefore did not dare to give much public information about the project and its address. Later they decided to establish a Facebook page and become more public by this. So far there were no attacks, violence or vandalism, except one small burglary.

A focus of the activities is to meet other people in a low-threshold situation. There is an open gardening afternoon once a week, which anybody can join. Otherwise, they meet mostly during weekends. Music is very important to the group. They often meet and bring their instruments, e.g. guitars and bongos, or start playing

spontaneously with “spoons or sticks”, while singing along. “Cosy get-togethers” was described as one of the important activities in the garden, too (Figure 15). They are using their harvest for shared food preparation and barbecues (Figure 16).

“[...] every weekend, when we sat together, after working the whole week, we barbecued together, we always used our fresh fruits and vegetables. So that was splendid, a lot of fun.”



Figure 15. View from near the entrance to the raised beds and the bonfire area with self-built sofas. The tent was rigged for the barbecue on that day, as rain was forecasted



Figure 16. The food preparation for a barbecue

Organising the intercultural garden was part of the AWO volunteer coordinator's job until 2019. Since January 2020 the garden has had no official budget (status as of spring 2020). Until then, the garden was a part of the AWO's refugee and migrant help and some of their activities took part there. Volunteers could offer workshops in the garden and sometimes there were exhibitions.

The project is well connected to the neighbourhood and other activities in the city, as they have connections to several local political parties, authorities and institutions. They won two awards, on local and federal level.

The regular open door on Tuesdays had to close in spring 2020 due to the pandemic regulations. The members still went there, organising attendance in the chat group, so that not too many would come at the same time. The barbecue was the first group activity in 2020. During the first lockdown help with official forms was offered for refugees in the garden, which usually takes place indoors.

3.1.2.3. The interviewee's relationship to the place

The interviewee lives a few kilometres away and comes to the garden by bike, motor scooter or by foot. He has lived in his neighbourhood for several decades, originally he immigrated from Turkey. He had known about the project since its beginning, because the cultural association he is active in resides in the AWO community centre. He took part in the preceding workshops which led to the idea of having a community garden. He was not able to join the garden in the very beginning, but joined some months later. From then on, he was very dedicated. He is very involved in local community activities and an active member of a political party. He is proud of the fact, that the garden has won several prizes.

He visits the garden at least twice a week and on the weekends. The length of each stay depends on the tasks and can vary from three hours to a whole day. He is responsible for two organisational tasks in the garden: filling the pond and organising the delivery of fire wood.

Even though the interviewee has his own small garden, he likes to participate in the project, because of the community. The garden is a "feast for the eyes" for him. It is the first garden he co-created from scratch and it offers him more scope for design than his small private garden.

He "grew up in nature, so to speak" and feels very connected to it. In nature, the interviewee can reduce the stress of his daily life and this calms him. He uses the garden consciously for this reason, including the pond. "It feels like a holiday in nature" for him. He also enjoys to be able to get fresh vegetables.

“I love the nature, the garden obviously, and it’s better to pick the fruits directly off the trees and to eat them instantly, that is more fun. Or to get a tomato directly from the plant, halve it, a bit of salt on it and eat it. That is a nice experience.”

The interviewee describes the group as a “colourful family”, as they come from different cultures, ethnicities and religions. He enjoys making music together, sitting around the fire and sharing meals. For him, making compromises and accepting the wishes of others is part of being a community. The common experiences of their activities are very important for him.

“We can do things together and enjoy the fruits of our shared labour. And by that close friendships emerge and you look forward to come here every time. And that is the most joy, kind of.”

The act of caring about the plants is as essential to his relationship to the garden, as caring for the other members:

“When you care about something, then something can evolve out of nothing. And if you don’t care and just let it lay there and treat it normally, it will stay nothing.”

He would be sad if the project would eventually end, as he is very attached to the place and the group. He would miss the garden, but suspects that the community would not “die totally” and meet at other occasions.

The interviewee did not feel restricted by the lockdown in spring 2020, because he was able to visit the garden.

3.1.3. The community garden including Community Supported Agriculture

The project “Solawi Gemeinschaftsgarten Trier” (*CSA community garden Trier*) is a combination of a community garden and a Community Supported Agriculture (CSA).

In September 2016 a member of the group Transition Town (TT) Trier gave a talk at the green party about CSAs and a group of approximately 20 people decided spontaneously to start a CSA in Trier. In spring 2017, they began at the place, which already hosted a community garden.

3.1.3.1. Place and usage

The land is an ecological compensation site of 4000m². It is leased by the local Transition Town club from the municipality Trier. As there are not many usage possibilities for this space, the municipality is positive toward their activities. The direct neighbours are a gardening centre owned by a retail chain and a printing factory (Figure 17). The broader neighbourhood is a mixture of industrial area, tree nursery, gardens and fields and is in the outskirts of the city.

The site has production and social spaces (Figure 18). Production spaces include plant beds, tool sheds and an area of fruit trees. Main social spaces are the meeting square with a fire place, the kitchen shed and several places across the site. In the forest behind the fire place one can find the compost toilets and a caravan, which is by children to play and used by some members to stay overnight. There is also a small inflatable pond and some hammocks between the fruit trees. Next to the tree group are some bee hives (Figure 19). In a few areas of the project, some plant beds and greenhouses are still used by people of the former community garden.

The CSA is based on permaculture and organic principles, even though they are not certified organic (Figure 20). Optical attractiveness is taken into consideration in the management of the space, including the production sites. Fruit trees, e.g. peaches, grow in between some of the beds.



Figure 17. Map of the community garden/CSA, not true to scale. Based on Google; GeoBasis-DE/BKG; GeoContent; Maxar Technologies; Kartendaten (2020); GeoBasis-DE/BKG (2009)



Figure 18. The meeting square and the caravan in the background



Figure 19. Beehives between fruit trees in the middle of the garden



Figure 20. A part of the vegetable beds, with the tool shed in the background. The “tent” is an installation of an earlier year, tomatoes grow there.

At the site the CSA neither has the space for serious production nor sufficient storing facilities. The aim is not to produce enough harvest to cover a person’s or

family's need for vegetables. A cooperation with a farmer approximately 40km away is planned for the future (Kropp 2020).

3.1.3.2. Group structure and social activities

The initial group was a mix of persons from the TT group, the local foodsharing movement and students of psychology. A combined CSA and community garden was the aim from the beginning.

The business model evolved out of the circumstances. No economic activities are allowed on the land, therefore the gardeners are freelance experts who consult, instead of being employed. In 2020 two people were consulting in farming and one occasionally for carpentry work. The shares must cover the CSA's costs, as they do not receive external funding or credits. In 2020 the CSA produces shares for 100-120 persons. The bidding round for shares is once a year. It is also the time new members can join. The share's price is based on a solidarity principle to make it affordable. It is difficult to balance between fair payment for the consultants and affordable prices for the shares. This has influence on the group's diversity.

Decisions are made at meetings, except regarding topics which require the expert gardeners' opinion. It is important for them that the group fits well together and people can cooperate, as they organise all tasks together. In the beginning, new members were called in by consensus. Even today, new members mostly originate from the social circles of existing members and need to be accepted by the group. More women than men are part of the group. Most people have an academic background. It is always possible to join by volunteering in the garden and receiving some harvest in return.

The factor of life quality for CSA-members and garden users is as important as economic or ecological factors. There is no set amount of time the members need to participate. So far there have not been any major problems in the group. There is some fluctuation, none of the founders are still active today. In the beginning, most members were university students. This changed and more people who have settled in Trier have joined later. Some participants have private gardens, are part of a food cooperation and/or have additional vegetable delivery boxes.

The shares are picked up every Thursday. The vegetables are harvested in the morning and brought to the shed (Figure 21), where the amount of each variety per share is noted on a blackboard. On another blackboard, the members can see which fruits and herbs they can harvest themselves. Some of the members pick up shares for others, but most people come themselves, as it is also a social meeting event.



Figure 21. The harvest shed on Thursdays

Summer parties are arranged and people can use the space to celebrate weddings, birthdays and other parties. People come on Thursdays to spend their leisure time, meet friends (members or non-members), relax, garden or do other tasks. Parents like to bring their children, so that they can play outdoors.

The whole project was initiated and planned with the political and societal purpose of creating a social and economic alternative. The members see the project as a trial space for this purpose. Still, physical aspects as getting fresh vegetables and fruits, learn about gardening, be outdoors and active are important as well. People with different interests and abilities participate and not all of them do gardening. Members are respected as part of the group no matter their temporal engagement.

A strong group mentality can be noticed when observing the everyday activities. The garden group often takes a break, when another member arrives to join them and regularly they use this opportunity for a common break to cool off or to have a snack.

3.1.3.3. The interviewee's relationship to the place

The interviewee is in her early 20s and moved to Trier for her studies in the autumn of 2018. She has been active in the project since May 2019. Before she joined the project, she was interested in gardening, plants and sustainable alternatives to today's society. A friend, who was active in the project, showed her the garden. During this time, she also dropped out of her studies. The consultant gardener talked to her during that visit and spontaneously she began an internship the next day. This internship had no set hours. She was there as often as possible, which varied between zero and seven days per week, depending on weather or available tasks.

“Actually there were no reasons for me not to come here. Except there were things, which blocked my time”

She began a new study program in April 2020 and is satisfied with it. She considers taking fewer university courses next semester to be more involved in the project again. Altogether, she plans to structure her time more efficiently to be able to visit the garden more often.

The interviewee describes her relationship with the garden as “appreciative, mindful”. It is a place for “recovery” and “occupation”, where she feels “calm” and “peaceful”. She can “rest her mind” while gardening. It is a “place of community” and an “educational institution” for her. She learns from others and by trying out things herself. Since the beginning of her studies, she has tried to visit at least once a week, mostly on Thursdays for the harvest share. Then she gardens, takes care of general maintenance tasks, prepares meals for the group or relaxes and reads a book. She likes to be outdoors in nature there. Her activities are often influenced by her visiting times. In the evenings she comes to meet people at the campfire, to barbecue or cook together and to stay overnight.

Because of her studies, she cannot visit the garden too often, which she experiences as a definite loss. She still sees herself as a part of the group, but not involved in the working processes anymore. Not to be able to come at all would make her “sad” as the project is “important” to her “especially now”. Besides being outside, she would miss the vegetables and the people.

“[...] It is a place [...] where much life takes place: whether the life together or the bees that buzz around, all the plants that grow here. And it is [...] a nice place, where utopias can be lived, yes. Therefore I am very attached to this place.”

For the interviewee this place is a place where “things come into being” (*Ort des Entstehens*). This involves processes in nature as well as in the group and shows her pride for the project.

“I think this is a place where things originate. That is very nice, and probably, this is the same in all gardens: to be able to witness how the plants grow, the whole circle of the year.”

The interviewee can identify with the ideals of the project, the socio-economic and the environmental aspects and the holistic approach. She sees it as a “place of practiced utopia”, where she can “put [her] political thinking into practice”.

To her, the garden is a place where people with different circumstances and backgrounds meet and she describes the behaviour towards each other as “benevolent”. Aspects that should be improved are the group’s diversity or the connection between the project’s economic aspirations and (financial) reality, both in consultants’ wages and share prices. She wishes that societal circumstances would allow people to be more involved in the project. This could lead to more participation and better collective decision making, as people would know more about the processes.

The interviewee enjoys the whole site and describes it as “idyllic”. She wonders, if her favourite spots depend on her motivation when she is in the place; she likes the fire site because of the memories of good evenings, but she also likes the garlic bed, as she loves the taste of garlic.

When the lockdown began in spring 2020, all the interviewee’s appointments were cancelled and university had not started yet⁵. She spent this free time “constantly” in the garden. For her, this time strengthened her relationship with the project. She felt good to be active and involved, and due to that, the pandemic did not stress her.

3.1.4. The church garden

The “Kirchgarten Pfalzel” (*Church garden Pfalzel*) is located in the church yard of the Catholic church in the district of Pfalzel in Trier.

The community garden developed out of environmental activities by the parish. It was initiated by members of the *Laudato si’*-group, which is inspired by the second encyclical of Pope Francis in 2015. The encyclical deals with environmental issues and climate change. The *Laudato si’*-group is part of the group that organises the Service of the Word in the parish.

3.1.4.1. Place and usage

The garden is in the inner yard, located between the church, a chapel and other historical buildings (Figure 22). Parts of the buildings date back to the 4th century AD, when it was a Roman house (*palatiolum*). Throughout history, the buildings changed and the place was used as a monastery, a barn and then became a church. The last transformation took place in the 1960s, when the church was enlarged. This gave the yard its present form. Even though the garden is surrounded by

⁵Usually in Germany the semester break between winter semester and summer semester is February to April, and in 2020 at many universities, including hers, the course start was postponed for two weeks (Universität Trier 2020).

buildings and a wall, it is accessible to the public during the day, as the gate is open.

Originally, the yard had a lawn and a few bushes in a back corner. It was used for the annual summer party and for the children of the kindergarten in the neighbourhood a few times a year. The garden's size is approximately 400m².

In early summer 2019 construction work needed to be done, including digging in the yard. The group took this occasion to begin with the gardening project. They started of with the flower bed at the church's side, including two raised beds for vegetables and herbs (Figure 23, Figure 24). Neighbours and/or parish members donated plants, the cut flowers are used for the altar decoration. The vegetable beds were introduced in spring 2020. A small garden part is still a lawn and is supposed to be incorporated into the garden later. They are planning to install more benches, so visitors can spend longer time in the garden.



Figure 22. Map of the church garden, not true to scale. Stadt Trier (2020) / dl-de/by2-0, www.trier.de; GeoBasis-DE / LVermGeoRP2020, dl-de/by-2-0, www.lvermgeo.rlp.de; openstreetmap.org contributors, opendatacommons.org, edited data



Figure 23. View to the entrance gate with the modern part of the church, the flower garden and raised beds. The entrance to the church is on the right under the roof



Figure 24. View from the entrance gate. The church and flower garden are on the left and the chapel on the right. The church apsis and the vegetable garden can be seen in the background. The house on the very end belongs to the historical building ensemble but is not connected to the parish today

The vegetable garden's design is inspired by monastic gardens with a path cross and four beds (Figure 25). Mosaic plaques of a Stations of the Cross and the font of a deconsecrated church are intended to be used in the vegetable garden as decoration. The plaques should hang on the wall around the vegetable garden. The font is planned as a little fountain standing in the middle of the path cross.

The projects' approach is to preserve traditions and history. Their main goals are to design a traditional kitchen garden, attempt to create a wildlife garden and include religious features as well as features of the place's history. Most group members have childhood memories of traditional kitchen gardens with a mix of vegetables, berries, herbs and flowers. The gardeners had no experience with wildlife and environmental friendly gardening in the beginning. Therefore, they collaborate with an expert in wildlife gardening (Figure 26). They participate in the regional seed saving program, for which they cultivate an old pea variety from Pfalzel. They would like to plant biblical plants, but have no specific ideas yet. Place design and used plants, whether already implemented or planned, are influenced by the idea of showing the place's history. The historical and religious surrounding has a strong influence on the garden and its design. The gardeners assume that the monastery garden could have been on areas of the present garden. They know that a cemetery was on the site some centuries ago, as they found human bones and skulls when digging, which the local priest buried again on the present churchyard.



Figure 25. View of the vegetable garden with the apsis on the left and some of the water tanks on the right site, next to the chapel



Figure 26. Clary Sage, a recommendation by the gardening expert to attract insects, especially the carpenter bee

3.1.4.2. Group structure and social activities

The church garden work was sourced out of the Laudato si' group by the parish and is now managed by the group "Friends of the Church garden" in connection with a neighbourhood group for local activities in Pfalzel. All members are pensioners, live in the neighbourhood and have been engaged in parish activities for a long time. Therefore, they all know each other from several different social settings. The group consists of eight women and two men. They have a jour fixe every Wednesday afternoon, where they meet for gardening, coffee and a chat. They communicate via email and telephone. If needed, e.g. in spring when there is much work to do, they meet more often. They are all very familiar with the place, its use and character. They are aware of the connections to and expectation from other members of their social groups (neighbourhood and parish) to the place and its usage. The members visit the garden at other times, in addition to the weekly meetings individually, either for gardening, harvesting or relaxation.

The community garden is an informal project and still closely linked to the parish. The participants do not want to start a formal association. They are supported by the parish and the neighbours. The project is funded by the parish, other Catholic organisations in Trier and receives funding for community gardens by the federal state.

The gardeners have previous gardening experiences on different skill levels. They get new impulses through focussing on wildlife and organic gardening. Their approach to this field is a process between learning together and from each other. The place is a meeting place for people of the parish, the neighbourhood and tourists. The group is interested in having contact with other regional community gardens.

A harvest festival with a communal soup dinner for the parish was organised in 2019. They organised a lecture by the garden expert in autumn 2019 and want to repeat it. As they started the garden quite late in the season in 2019, they were planning on more activities for 2020. Those were supposed to be small events with a religious background, for example connected to the church year, or with a gardening theme. In spring 2020, they cancelled them all due to the pandemic, except for a group trip to a seed garden in the region. Another envisaged activity they hoped would be still possible is a soup dinner in autumn 2020.

3.1.4.3. The interviewee's relationship to the place

The interviewee's connection to the place started long before the project "church garden" existed. She lives in the very close neighbourhood to the place since decades and actively engages in the parish since a long time. The other members also live in the neighbourhood and are engaged in parish activities since a long time.

The interviewee has a connection to gardening and agriculture since childhood. She describes her previous relationship to gardens and gardening as an adult as quite shallow. Since they started the community garden the interviewee developed a fascination for gardening and the processes in nature she started to observe. She calls the focus on wildlife gardening, the common learning and experiences a "source of inspiration/catalyst" (*Impulsgeber*) for the gardening in her own private garden. It influenced her garden design as well as the perception of her garden's surrounding and the processes which occur in it, such as ecological interactions, seasons or signs of climate change⁶. Gardens as a "benchmark" give opportunities to witness nature's processes and being connected with it. The interviewee got aware of time and the course of things: "[...] some plants are suddenly gone, and others are there [...] very surprisingly". The thoughts of transiency might be connected to her catholic belief. She sees the garden as an analogy for life:

"The connectedness with nature... with life... You see how it grows and how it withers. Well, not everything succeeds all the time, and that's a good thing. That

⁶She remembered that in her childhood snapdragon (*Antirrhinum majus*) never flowered in winter

is... it brings you back to the ground... you get aware of so much: transience (*Vergänglichkeit*)... and life, everything close together.”

Another important aspect of the community garden is that it helps the interviewee structuring her daily life. It gives her a purpose. When she retired she felt a bit isolated. She enjoys her family, but the garden is a connection beyond that. In the garden she meets people with similar interests, comes into contact with new people or discovers new sides of people she already knew. She enjoys that this particular activity enables chats and topics that would likely not occur on other occasions in her social circles. She is proud of the group’s work and that the garden gives a good impression of the church and parish.

The interviewee described the place as “history-charged”. The historical and architectural setting is an important feature for her. The interviewee uses the garden for relaxing and being on her own. She is aware that others, like members of the parish or neighbours, might visit as well and could start a chat.

“This is a very historically charged place. So many things have been here before, and there was probably also a garden in the same place before [...] So, yes, this is a good place, also for meditating. Because you sit in a sheltered place. And still it is public. But you sit very sheltered”

The physical garden work and garden maintenance is important for the interviewee. She enjoys to be “alfresco” and “outside in the nature”. Regularly she just comes round for a short time, to do a quick weeding or spontaneously harvests herbs when cooking.

“You come back three days later and marvel: Oh, that grew even more! And that I find fascinating, that is great.”

An eventual loss of the place would be “a pity” and she would “absolutely” miss it. This includes the place with its plants and history as well as the community, their regularity in contact and the physical work.

Both the community and the garden were a great support for the interviewee in the spring lockdown in 2020. While all other social activities were cancelled, they continued to meet in the garden, since it is an outside place. It helped them to stabilise, as they felt quite insecure in the first weeks. They even met more often than only Wednesdays as it was spring and much to do.

“The garden offered the possibility to meet and to work together and this... yes, this was... That’s right, I never have thought about that

before: It was one of the few things you could still attend. Everything else was cancelled. Sometimes I felt very isolated.”

3.2. The role of place relationship for participants in garden initiatives

It is noticeable, that the interviewees in all four cases have place attachment to their respective garden projects. However, interviewees and projects differ in character: While some main features of place attachment relationships are present in all cases, the features' characters sometimes differ.

3.2.1. General place relationship to garden projects

The experiences by individuals and groups strengthened their relationship to the places. Examples of this are community activities like planting together or having a summer party and individual experiences, such as relaxing or the direct contact to nature. The characteristics of places and groups give meanings to these places, which again helps participants to identify as a group and to be a community (Figure 27). This also happened for the groups that were already part of a community before their garden projects, such as in the church garden and the intercultural garden. The places enable contacts and qualities of relationships, which the participants might not find in other situations. Times of change (e.g. moving, retirement) made the interviewees more aware of their relationship's character to the garden. All interviewees mentioned only positive connections to place and group.

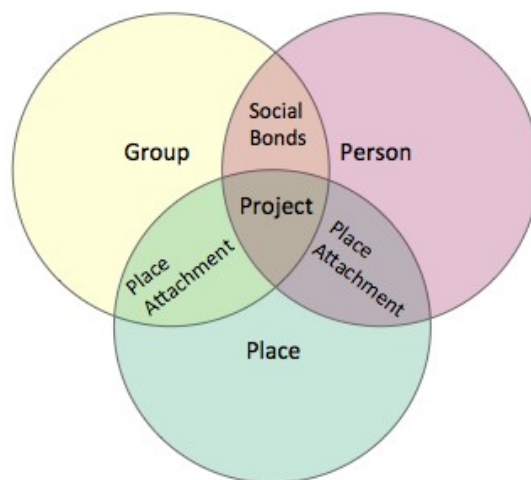


Figure 27. Connections between group, person and place in garden projects

The interviewees mentioned natural elements and the involved maintenance as part of the place making, which they are proud of. Historical continuity and an attachment to a past place occur in three cases. This is connected to the history of the place or the person's background. The place – group/individual relationship began before the projects were initiated in the church garden and the allotment club, respectively. A subliminal individual spiritual connection might exist for some of the interviewees. At the very least, the gardens enable an intense contact to the environment and natural processes. This gives an opportunity to reflect on ones surroundings and the environment, including the individual's life, as a holistic system.

Feelings of grief mentioned at the prospect of an eventual loss of the respective place show the importance for the interviewees. However, the community gardeners were confident that the group would still continue to exist in some form, which was reassuring for them. Belongingness to group and place was not only expressed by the gardens' regulars. In two projects, the intercultural garden and the CSA garden, people keep visiting even though they are not able to participate regularly.

Participants in all four projects have an intense interest in nature and environment and the wish to support "nature" by their activities. The gardeners seem to have different concepts of organic gardening and the support of wildlife. The dimensions of their ideas seem to be linked to their level of knowledge and interest in gardening and nature as well as their personal background. The data does not provide a reason why all four projects stressed sustainable gardening as one focus of their activities, especially as their definitions seems to vary. It might be connected to the overall growing interest in a sustainable and "green" lifestyle.

3.2.2. Found functions of place relationship in the initiatives

3.2.2.1. *Food production*

In the projects, food production is an important factor in the communities' identities, as it is connected to cultural aspects. However, it is not the main or sole focus of the projects' activities or concepts. Planting food crops is important in all gardens and a basis of their activities. Caring about the food crops, harvest and having a shared meal has a unifying role which strengthens the group bonds and gives a purpose in the community gardens. The offered group activities in the allotment club have a similar role. Gardeners in all initiatives name the food production as a way of connecting to memories, often from childhood, of gardening and/or nature. It is also mentioned as a possibility to stay in touch with cultural roots by growing certain plant varieties and preparing and sharing dishes

for the common meetings. The church garden adds a religious connection to the food, for example by serving soup after the harvest festival service. Aspects of food sovereignty, e.g. the possibility to produce organic, local and seasonal food is important for many gardeners in the projects. In the allotment garden club, food production is regulated by law, stemming from the tradition of supporting the food security and self-sufficiency of the citizens. A feeling of achievement through food production can be found throughout all the projects.

3.2.2.2. Refuge and safety

The gardens, both community gardens and private parcels in the allotment garden club, are designed for the gardeners' needs. All interviewees feel safe and protected in their gardens. How strong this support as a safe haven can be was proven during the lockdown in spring 2020. All four interviewees state that the sanctuary function of the garden is one of the most important reasons for their visits. The participants prefer the contact to the physical features of the gardens over the group for refuge and recreation in their daily life. The allotment gardener refers to his private plot in this context. Nevertheless, the group is always involved, as it shapes the place and trust to the other members is vital. For some participants, the gardens seem to act as a safe space, providing refuge from general society. It might especially happen at the intercultural and the CSA garden, although motivations differ between the two.

The interviewees emphasize physical motion and being outdoors, which both are services provided by the gardens, as important changes to their indoor routines. Especially the allotment gardener and the church garden interviewee stressed the positive aspects of physical exercise by gardening. Although gardening is viewed as a commitment by the interviewees, it remains voluntary. Therefore, even work intensive and time sensitive tasks are not viewed as chores, but as an overall relaxing activity. While experiencing feelings of responsibility, the gardeners are aware that the group can manage without them, if they have less time to be active. Nobody mentioned any feeling of pressure or stress in regard to gardening and their groups.

3.2.2.3. Distinction and territoriality

There might be unconscious thoughts of the distinctiveness to other groups, besides existent individual characteristics of the projects. However, only members of the CSA garden expressed views of distinction, which seem to be based on a feeling of moral superiority to other enterprises and gardening concepts.

While territoriality might be strongest in the allotment garden club, certain connected behaviours could be found in all initiatives.

3.2.2.4. Bonding by memories

Groups and interviewees bond to places through personal memories. These bonds are either to the specific places, general former activities in nature and gardens or to food (production). Especially older gardeners reported childhood memories. Particularly general memories, that several group members share, influence the garden designs, the choice of used plant varieties, offered activities and other aspects of the projects. Memories give symbolical meaning to the places, which is one reason for the gardeners to visit regularly and continually. Memories are also a reference to a past self, which they can align with their present identity. This can give new impulses, as the church garden interviewee mentioned in connection to her own garden.

3.2.2.5. Purpose and identity

Gardening and group activities give the interviewees a purpose and orientation in life. Some depend on it more than others. This is influenced by their interest, life situation and other activities. Place identity can be found among the gardeners in different levels. Realising that they fit into the group and the project strengthens their identification with the project and their identity. To be familiar with the places, the tasks and the groups can give a feeling of control and that they are able to manage this environment. This can support general self-efficacy and therefore self-confidence. In the allotment club, this can happen to gardeners who do not participate in group activities as well, if they feel comfortable in their plot.

The projects are either a strong network by themselves or developed out of one. Teaching and sharing gardening knowledge among each other or getting inspiration from outside, practical or general, is important in the projects. The interviewees emphasize that the possibility to put this knowledge into practice is part of the project's identity for them. The community garden interviewees stated that they enjoy the knowledge exchange to raise their own level of experience and because it strengthens the group bonds as they share a common experience. The gardeners' knowledge about gardening and nature, reported by interviewees and others, is based on family behaviour in the gardeners' childhood or on their own interest.

4. Discussion

Individual attachment in the garden initiatives is related to the places and the groups. The groups also have attachment to the places. These attachments are interlinked (Giuliani 2003; Manzo 2003; Scannell & Gifford 2010). It depends on the individual's character and interests as well as the projects' character, if the attachment to place or the group is more important (Kingsley et al 2019; Teuber et al. 2019, Manconi et al. 2020). Place attachment seems to be more affected by the duration of connection than group attachment. Since the places are connected to the group activities, it is difficult to clearly differentiate between an attachment to the place and an attachment to the social bonds. This overlap can be explained by the tripartite model of place attachment (Scannell & Gifford 2010).

4.1. Place attachment to garden initiatives

The gardeners' place attachment could be found in different types of behaviour, affections and cognitive reactions. Place attachment behaviour reported by the interviewees was the regular garden visits, especially for recreation but also to do gardening tasks and to meet the group. Similar behaviour was found in other studies (Kingsley et al. 2019; Menconi et al. 2020). Affections mentioned were mostly positive but all named grief at a potential loss. This is typical for positive place attachment (Giuliani 2003; Manzo 2003; Scannell & Gifford 2010). Cognitive reactions were memories from childhood. Memories connected to specific or generic places, people or activities are important for place attachment (Twigger-Ross & Uzzell 1996; Manzo 2003; Morgan 2010; Scannell & Gifford 2010). The interviewees mentioned memories of the places, gardens or nature in general nature. Memories of food and cultures are also important. It could be shown that place attachment has an impact on several of the activities in the garden projects. Food production and visiting the garden for recreation fulfil basic needs of the gardeners. Similar findings by Menconi et al. (2020) and Teuber et al. (2019) showed that food production does not relate to self-sufficiency and efficiency is not a focus. Still, the gardeners care about the activity of producing food. The recreational aspect of garden projects was found in many studies

(Calvet-Mir et al. 2016; Kingsley et al. 2019; Lee & Matarrita-Cascante 2019; Teuber et al. 2019; Menconi et al. 2020). This is linked to a feeling of safety (Giuliani 2003). While some studies describe the effect as “being away” (Kingsley et al. 2019; Teuber et al. 2019), others mention the focus on the garden activities and thereby ignoring other thoughts (Calvet-Mir et al. 2016). The interviewees mostly mentioned the first feeling. These experiences strengthen the gardeners’ relationships to the places and give them meaning (Giuliani 2003; Manzo 2003; Scannell & Gifford 2010).

4.2. Project diversity and social aspects

The four projects and their gardeners share many similarities, e.g. the love of gardening and to be committed to a group. There are significant differences as well, e.g. the structure of governance and the projects’ aims or foci. In coherence with previous findings, the most important factor for an intense attachment to a garden and project seems to be the overlap in interests, preferences and the possibility for identification (Firth et al. 2011; Calvet-Mir et al. 2016; Ioannou et al. 2016; Kingsley et al. 2019; Lee & Matarrita-Cascante 2019). Factors that can influence the participation in garden initiatives are geographical location, reachability, the form of ownership and governance structure, physical condition and common interests or culture (Firth et al. 2011; Calvet-Mir et al. 2016; Ioannou et al. 2016; Noori & Benson 2016; Lee & Matarrita-Cascante 2019; Kingsley et al. 2019; Teuber et al. 2019). The “hard facts”, such as geographic location and reachability are less important to the interviewees, than the “soft” aspects, such as similar interests, values, ownership and organisation. The volunteer activities in the projects are congruent with previous interests in association work and align with the gardeners’ values. Similar findings by Kingsley et al. (2019) showed, that many community gardeners had previous volunteering experiences. The interviewees share these activities as a basic similarity. Nevertheless, their individual characters and interests led them to the specific projects they are a part of, as they best fit their interests and needs. Directly or indirectly, all interviewees stated some of their moral values and how these values are connected to their participation in the specific gardens.

The study’s sample of community gardens supports similar findings (Ioannou et al. 2016; Kingsley 2019) that these groups are quite heterogeneous in their backgrounds regarding age, gender and education. The backgrounds of the allotment gardeners seem to be similar to the findings of Teuber et al. (2019), a well balanced representation of demographic attributes such as gender, age, and educational background.

It is difficult to say, judging from my data, if the community became more relevant for the interviewees gradually or was already quite important from the beginning. Even if community might not be among the initial main factors to join a project for some persons, its importance for them often grows with time (Calvet-Mir et al. 2016; Kingsley et al. 2019). The church garden and the intercultural garden developed directly out of previously existing groups. The CSA garden was initiated by people out of a network of groups.

Modern community gardens often have a stronger political or societal approach than traditional allotment clubs and these approaches can be one reason for people to join the projects (Ioannou et al. 2016; Kingsley et al. 2019; Karge 2021). Food sovereignty, the ownership and the structure (top-down, bottom up or squatted) can be part of the political approaches (Firth et al. 2011; Calvet-Mir et al. 2016; Kingsley et al. 2019). Still, (German) allotment clubs have a societal function as well (Bundesgerichtshof 2004; Rosol 2010; Teuber et al. 2019). The studied garden projects differ in their governance structure. Based on my data, it seems that the differences in governance structure are smaller between the community gardens than in comparison to the allotment garden club. All of them have certain political or societal approaches.

Gardening as a possibility to gain knowledge about natural processes and an exchange of knowledge is a common feature of community gardens (Calvet-Mir et al. 2016; Menconi et al. 2020).

4.3. Characteristics and qualities of the different kinds of urban green community spaces

In many places, interest in community or allotment gardening has been rising for several years due to societal changes and trends (Rosol 2010; Calvet-Mir et al. 2016; Gustedt 2017). The Covid-19 related lockdown in spring 2020 probably enhanced the level of interest even more, as the enquiries in the studied allotment club suggest. Since the first lockdown began, city inhabitants have become more aware of the green spaces in their immediate surrounding and searched for possibilities to spend their leisure time outside (Karge 2021).

Specific interests can bring people together who would hardly meet otherwise (Firth et al. 2011; Ioannou et al. 2016; Kingsley et al. 2019; Karge 2021). This may lead to greater social cohesion and can increase resilience in individuals, the project group and the surrounding community it is embedded in. Still, togetherness can have negative impacts as well, e.g. exclusion or social

oppression (Giuliani 2003; Castell 2010; Scannell & Gifford 2010; Firth et al. 2011; Kingsley et al 2019).

4.3.1. Allotment clubs and community gardens

The main difference between the two garden types is the usage of space with a focus on individual refuge or being part of a group. While the grounds of allotment clubs are seldom under existential threat, this is not the case for many community garden projects, which are often seen as interim use (Gustedt 2017; Karge 2021). This was not the case for any of the community gardens studied, because they are all on grounds, which either offer few usage possibilities or which belong to the institution the group evolved from. Access to allotment gardens can be more difficult than joining community gardens, which was shown in the cases and which is supported in literature (Ioannou et al. 2016; Kingsley 2019). However, none of the community gardeners mentioned problems with access to allotment gardens as a reason for choosing the community gardens. Arguments for them were the specific interests, foci and especially gardening as a group activity. While the multi-quality value of allotment gardens is accepted by politics and planning in Germany, the role of community gardens is still not set (Rosol 2010; Gustedt 2017; Karge 2021). As research and this study show, both groups should be recognised as institutions which address similar, yet different individual needs, especially in urban areas, such as connecting people not only to the environment but also to their city and community (Rosol 2010; Firth et al. 2011; Calvet-Mir et al. 2016; Kingsley et al. 2019).

4.3.2. The importance of project diversity in cities

In many (western) cultures, it is assumed that “real” life happens in the private space (Manzo 2003). The split between public and private can be seen as feeling responsibility as a citizen – including the right to participate in public life – or not (Arendt, see Duvall Jacobitti 1991). Gardening initiatives combine private and public life, as they provide individuals with the opportunity to directly shape a (semi-) public space in the city according to their wishes and needs. This, in turn, may lead to place attachment, connection and resilience (Firth et al. 2011; Noori & Benson 2016; Gustedt 2017; Kingsley et al. 2019). The initiatives offer privacy, but are public at the same time, meaning that interactions take place at an intersection of the private and the public sphere (Arendt, see Duvall Jacobitti 1991). Garden projects as (part of) public meeting places for people of different backgrounds and interests can offer social cohesion and people have the possibility to act as active citizens (Arendt, see Duvall Jacobitti 1991; Karge

2021). Places like this could be important tools for communication, learning, understanding and integration in cities.

This study shows that people search for gardening communities according to their individual character and needs, supporting earlier findings (Rosol 2010; Calvet-Mir et al. 2016; Ioannou et al. 2016; Kingsley et al. 2019; Lee & Matarrita-Cascante 2019; Teuber et al. 2019). Not everybody is interested in gardening and garden projects⁷ (Kingsley et al. 2019; Teuber et al. 2019). Offering space for diverse activities could reach more people than singularly defined projects. This can enhance social capital and resilience of the connected community/communities, since meeting places would be offered and people could connect via common activities as well as using the same place for different purposes (Firth et al. 2011; Kingsley et al. 2019; Karge 2021). This requires support by policy makers (Firth et al. 2011), while they can also demand concessions from the garden communities, such as asking them to either open up or partner with other actors (Karge 2021). Other actors in this dialogue should be private land owners, such as churches (Adam & Klemme 2020). Implementing gardening initiatives into multifunctional spaces can be one instrument to manage usage conflicts in public or semi-public green places (Kingsley et al. 2019). The number of such conflicts increased drastically during the pandemic (Basel et al. 2020; Karge 2021; Keilani & Hörnicke 2021). This may be one solution to find new ways of using the “dying” inner-cities (Novy 2021). This process has been ongoing for several years, but was accelerated by the restrictions during the pandemic.

4.4. Conclusion

Allotment clubs and community gardens are places in the city that fulfil several important needs of the residents. Place attachment has an impact on many of these needs. It interlinks individuals and groups with places and can thereby also connect people to groups. Social cohesion takes place within the garden communities as well as within wider networks, which can strengthen social resilience. Gardeners find a place for recreation and physical exercise. The places give them a purpose and the possibility for public participation, providing participants with a way to actively shape and influence their place of living according to their needs. This way, they can strengthen their attachment to the city or neighbourhood. Therefore, municipalities and other actors should support these groups, e.g. by helping them find spaces that are not under threat or for interim

⁷Even though it is common for many projects that not everybody there gardens. Other fields of activity that can be found in many projects are building, repairing or preparing food, e.g. in the CSA-garden and the intercultural garden.

use only, providing building material, tools, compost or plants, help with resources, such as providing a platform where projects can be initiated, offer supervision for organisational changes or mediate in conflicts.

4.5. Future research

While it could be shown that place attachment is an important factor for people to start gardening and thus shape places in the city as well as local communities, some questions remained unanswered, while others emerged as follow-up topics.

- It is interesting that the connection between natural processes and human life was mentioned twice, in the CSA-garden and the church garden. Even though similar metaphors can regularly be found in art, I was surprised not to find it in the literature except briefly mentioned in relation to place making in order by Noori and Benson (2016). It seems to be quite an effective way of connecting to nature, which reveals many complex relationships. Could this be an impactful and easily understood aspect in explaining the importance of actions in climate change and environmental protection as well as a useful tool in place making for residents?
- The differences between community gardens and allotment clubs seem to be bigger than the differences between different community gardens, despite their diversity. First experiments with community parcels in allotment clubs have already been initiated (Karge 2021). Which contexts allow for these different types of garden initiatives to be treated as one actor, and in which not? Is it possible that these concepts grow together more?
- How can “soft” factors, such as place attachment or social cohesion, receive more attention in urban politics and planning when it comes to the use of (semi) public spaces, especially concerning green spaces?
- What causes people to stop participating in urban green community projects or keeps them from getting involved, even though they are interested?
- How can garden projects become aware of and deal with negative group effects such as exclusion or oppression? If municipalities are interested in a diversity of projects, how can they offer support for such problems?

- How can high quality and low-threshold solutions be identified and implemented quickly by municipalities or other actors, in situations where the demand for urban green community projects in a city is much bigger than what is offered?
- How can gardening initiatives be part of multifunctional (semi-) public places, which revive inner-cities and offer an opportunity to participation?

References

- Adam, B., Klemme, M. (2020). *Die Stadt im Krisenmodus*. (Informationen zur Raumentwicklung. 2020: 47). Bonn: Bundesinstitut für Bau-, Stadt- und Raumforschung.
- Basel, C., Eckert, S., Strozyk, J., S. Wörpel, S. (2020). *Leere Innenstädte, vollere Parks*. *Tagesschau*. NDR/WDR, 30. March 2020.
<https://www.tagesschau.de/investigativ/ndr-wdr/datenanalyse-oeffentliches-leben-corona-101.html> [2021 – 02 – 22]
- Bell, S., Fox-Kämper, R., Keshavarz, N., Benson, M., Caputo, S., Noori, S., Voigt, A. (eds) (2016). *Urban Allotment Gardens in Europe*. London and New York: Routledge.
- Braun, V., Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*. 3 (2), 77-101.
<https://doi.org/10.1191/1478088706qp063oa>
- Brinkmann, S., Kvale, S. (2018). *Doing Interviews*. London: SAGE Publications.
<https://dx.doi.org/10.4135/9781529716665>
- Bundesgerichtshof. (2004). *III ZR 281/03*. <http://juris.bundesgerichtshof.de/cgi-bin/rechtsprechung/document.py?Gericht=bgh&Art=en&nr=29606&pos=0&anz=1>
- Bundesministerium der Justiz und für Verbraucherschutz. (1983). *BKleingG*.
- Bundesverband Deutscher Gartenfreunde. (n.d.). *Bundesverband*.
<https://kleingarten-bund.de/de/bundesverband/> [2021 – 02 – 18]
- Calvet-Mir, L., March, H., Nordh, H., Pourias, J., Čakovská, B.(2016). Motivations behind urban gardening: 'Here I feel alive'. In: Bell, S., Fox-Kämper, R., Keshavarz, N., Benson, M., Caputo, S., Noori, S., Voigt, A. (eds.) *Urban Allotment Gardens in Europe*. London and New York: Rutledge. 320-341.
- Castell, P. (2010). *Managing yards and togetherness. Living conditions and social robustness through tenant involvement in open space management*. (3080). Chalmers University of Technology.
- Cervinka, R., Schwab, M., Schönbauer, R., Hämmerle, I., Pirgie, L., Sudkamp, J. (2016). My garden – my mate? Perceived restorativeness of private gardens and its predictors. *Urban Forestry & Urban Greening*. 16, 182-187. <http://dx.doi.org/10.1016/j.ufug.2016.01.013>
- Creswell, J.W. (2007). *Qualitative Inquiry & Research Design: Choosing Among Five Approaches*. 2Nd edition. Thousand Oaks: SAGE Publications.

- DelGiudice, M. (2018). Middle Childhood: An Evolutionary-Developmental Synthesis. In: Halfon, N., Forrest, C., Lerner, R., Faustman, E (eds.) *Handbook of Life Course Health Development*. Cham: Springer. 95-107. https://doi.org/10.1007/978-3-319-47143-3_5
- DePoy, E., Gitlin, L. N. (2016). Introduction to research: understanding and applying multiple strategies. St. Louis: Elsevier Mosby
- Duvall Jacobitti, S. (1991). The Public, the Private, the Moral: Hannah Arendt and Political Morality. *International Political Science Review/Revue internationale de science politique*. 12 (4), 281-293.
- Firth, C., Maye, D., Pearson, D. (2011). Developing "community" in community gardens. *Local Environment*. 16 (6), 555-568. [10.1080/13549839.2011.586025](https://doi.org/10.1080/13549839.2011.586025)
- Giuliani, M. V. (2003). Theory of Attachment and Place Attachment. In: Bonnes, M., Lee, T., Bonaiuto, M. (eds). *Psychological theories for environmental issues*. Ashgate: Aldershot. 137-170.
- Gustedt, E. (2017). Reflexions on Urban Gardening in Germany. *Challenges in Sustainability*. 4 (1), 63-70. DOI: [10.12924/cis2017.04010063](https://doi.org/10.12924/cis2017.04010063)
- Hartig, T., Mitchell, R., De Vries, S., Frumkin, H. (2014). Nature and Health. *Annual Review of Public Health*. 35 (1), 207-228. [10.1146/annurev-publhealth-032013-182443](https://doi.org/10.1146/annurev-publhealth-032013-182443)
- Ioannou, B., Morán, N., Sondermann, M., Certomà, C., Hardman, M. (2016). Grassroots gardening movements: towards cooperative forms of green urban development?. In: Bell, S., Fox-Kämper, R., Keshavarz, N., Benson, M., Caputo, S., Noori, S., Voigt, A. (eds.) *Urban Allotment Gardens in Europe*. London and New York: Routledge. 62-90.
- Jacob, R., Heinz, A., Décieux, J. P., Eirimbter, W. H. (2011). *Umfrage. Einführung in die Methoden der Umfragenforschung*. München: Oldenbourg Verlag
- Johansson, R. (2007). On Case Study Methodology. *Open house international*. 23 (3), 48-54.
- Kabisch, N., Frantzeskaki, N., Pauleit, S., Naumann, S., Davis, M. K., Artmann, M., Haase, D., Knapp, S., Korn, H., Stadler, J., Zaunberger, J., Bonn, A. (2016). Nature-based solutions to climate change mitigation and adaption in urban areas: perspectives on indicators, knowledge gaps, barriers, and opportunities for action. *Ecology and Society*. 21 (2), 39. <http://dx.doi.org/10.5751/ES-08373-210239>
- Keilani, F., Hönicke, C. (2020). Die Sonne lockte Tausende Berliner raus. Polizei zählte 244 Corona-Verstöße am Wochenende. *Der Tagesspiegel*. February 22. <https://m.tagesspiegel.de/berlin/die-sonne-lockte-tausende-berliner-raus-polizei-zaehlte-244-corona-verstoesse-am-wochenende/26940196.html>
- Kingsley, J., Foenander, E., Bailey, A. (2019). "You feel like your're part of something bigger": exploring motivations for community garden

- participation in Melbourne, Australia. *BMC Public Health*. 19, 745.
<https://doi.org/10.1186/s12889-019-7108-3>
- Kleingärtnerverein Mariahof e.V. (n.d.) Termine. <https://www.kgv-trier-mariahof.de/termine/> [2021 – 03 – 31]
- Kropp, J. (2020). In den Beeten wächst und gedeiht es. *Trierischer Volksfreund*. April 01. https://www.volksfreund.de/region/trier-trierer-land/in-den-beeten-waechst-und-gedeiht-es_aid-49865827
- Lee, J. H., Matarrita-Cascante, D. (2019). The influence of emotional and conditional motivations on gardeners' participation in community (allotment) gardens. *Urban Forestry & Urban Greening*. 42, 21-30. 10.1016/j.ufug.2019.05.006
- Lewicka, M. (2011). Place attachment: How far have we come in the last 40 years?. *Journal of Environmental Psychology*. 31 (3), 207-230. 10.1016/j.jenvp.2010.10.001
- Manzo, L. (2003). Beyond house and haven: toward a revisioning of emotional relationships with places. *Journal of Environmental Psychology*. 23 (23), 47-61.
- Menconi, M. E., Heland, L., Grohmann, D. (2020). Learning from the gardeners of the oldest community garden in Seattle: Resilience explained through ecosystem services analysis. *Urban Forestry & Urban Greening*. 56, 126878. <https://doi.org/10.1016/j.ufug.2020.126878>
- Morgan, P. (2010). Towards a developmental theory of place attachment. *Journal of Environmental Psychology*. 30 (1), 11-22. 10.1016/j.jenvp.2009.07.001
- Noelle-Neumann, E., T. Petersen, T. (2005). *Alle, nicht jeder. Einführung in die Methoden der Demoskopie*. Berlin, Heidelberg: Springer Verlag
- Noori, S., Benson, M. (2016). Urban allotment garden: a case for place-making. In: Bell, S., Fox-Kämper, R., Keshavarz, N., Benson, M., Caputo, S., Noori, S., Voigt, A. (eds.) *Urban Allotment Gardens in Europe*. London and New York: Routledge. 291-319.
- Novy, B. (2021). Innenstädte schon vor Corona in Gefahr. *Deutschlandfunk*. February 21. https://www.deutschlandfunk.de/urbanes-leben-innenstaedte-schon-vor-corona-in-gefahr.691.de.html?dram:article_id=492893 [2021 – 02 – 24]
- Porst, R. (2008) *Fragebogen. Ein Arbeitsbuch*. Wiesbaden: VS Verlag für Sozialwissenschaften
- Presse- und Informationsamt der Bundesregierung (2020). *Besprechung der Bundeskanzlerin mit den Regierungschefinnen und Regierungschefs der Länder vom 22.03.2020*. <https://www.bundesregierung.de/breg-de/themen/coronavirus/besprechung-der-bundeskanzlerin-mit-den-regierungschefinnen-und-regierungschefs-der-laender-vom-22-03-2020-1733248> [2021 – 03 – 13]
- Rosol, M. (2010). Public Participation in Post-Fordist Urban Green Space Governance: The Case of Community Gardens in Berlin. *International*

- Journal of Urban and Regional Research*. 34 (3), 548-563.
DOI:10.1111/j.1468-2427.2010.00968.x
- Scannell, L., Gifford, R. (2010) Defining place attachment: A tripartite organizing framework. *Journal of Environmental Psychology*. 30 (1), 1-10.
10.1016/j.jenvp.2009.09.006
- Senatsverwaltung für Umwelt, Verkehr und Klimaschutz (2021). Berliner Gemeinschaftsgarten-Programm. <https://mein.berlin.de/projekte/berliner-gemeinschaftsgarten-programm/> [2021 – 03 – 04]
- Stadtverband Trier der Kleingärtner (n.d.). Vereine. <https://www.kleingarten-trier.de/vereine/> [2021 – 03 – 31]
- SWR Aktuell* (2020). Diese Läden sind dicht, diese dürfen offen bleiben. [TV program]. SWR. <https://www.swr.de/swraktuell/rheinland-pfalz/pk-montag-corona-100.html> [2021 – 03 – 13]
- tagesschau* (2020). Weitreichende Lockerungen kommen. [TV program]. ARD May 06. <https://www.tagesschau.de/inland/lockerungen-bund-laender-101.html> [2021 – 03 – 13]
- Teuber, S., Schmidt, K., Kühn, P., Scholten, T. (2019). Engaging with urban green spaces – A comparison of urban and rural allotment gardens in Southwestern Germany. *Urban Forestry & Urban Greening*. 43, 126381.
<https://doi.org/10.1016/j.ufug.2019.126381>
- Twigger-Ross, C. L., Uzzell, D. L. (1996) Place and Identity Processes. *Journal of Environmental Psychology*. 16 (3), 205-220.
<https://doi.org/10.1006/jevp.1996.0017>
- Universität Trier (2020). *Späterer Start des Lehrbetriebs im Sommersemester an der Universität Trier*. <https://www.mynewsdesk.com/de/universitaet-trier/pressreleases/spaeterer-start-des-lehrbetriebs-im-sommersemester-an-der-universitaet-trier-2981708>. [2021 – 01 – 26]
- Wikipedia (n.d.). Russia Germans. https://en.wikipedia.org/wiki/Russia_Germans. [2021-04-23]
- Yin, R. K. (2014). *Case study research : design and methods*. Thousand Oaks: SAGE Publications.
- ZDF heute* (2020). So werden die Corona-Beschränkungen gelockert [TV program]. ZDF May 06.
<https://www.zdf.de/nachrichten/politik/coronavirus-merkel-lockerungen-beschluesse-100.html>. [2021 – 03 – 13]
- Personal communication:
Karge, T. (2021) Urban and Regional Planner, Senat Berlin.
toni.karge@senuvk.berlin.de, interview 2021 – 01 – 15

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Appendix 1

Personal questionnaire

Interviewbogen

Ort:

Datum:

1. Wohnen Sie in der Nähe, und seit wann?
2. Wie kommen Sie hierhin, ist das einfach oder umständlich?
3. Seit wann kennen Sie diesen Ort (Anlage, Garten, Projekt)?
4. Seit wann haben Sie diesen Garten/sind Sie aktiv hier?

Hauptfragen:

1. Wie nutzen Sie den Garten, was machen Sie hier?
2. Was mögen Sie an dem Ort und warum? Spezielle Lieblingsecken? Gibt es dabei Unterschiede in den Tages- und Jahreszeiten?
3. Gibt es etwas, was Sie stört oder was sie gerne ändern würden?
4. Wie wäre es für Sie, aufhören zu müssen? Was würden Sie besonders vermissen?
5. Ist es ein wichtiger Ort für Sie, an dem Sie hängen?
6. Wenn Sie über den Garten/das Projekt nachdenken, woran denken Sie am meisten? (Erinnerungen/Bilder und Aufgaben, was überwiegt)
7. Wie würden Sie Ihr Verhältnis zum Garten beschreiben?
8. Was bedeutet der Garten für Sie?

Abschlussfrage: Hat sich Ihr Verhältnis zum Garten durch die Coronavirusbedingten Einschränkungen verändert? Wenn ja, wie? Haben Sie seine Rolle in Ihrem Leben nochmal deutlicher wahrgenommen?

Appendix 2

General questionnaire

Fragebogen allgemein:

Seit wann gibt es diese Anlage?

Wie groß ist es?

Warum an diesem Ort?

Wie viele Parteien machen mit, wie viele Menschen?

Gibt es Besonderheiten bei der Organisation?

Schwerpunkte in Aktivitäten?

Regelmäßige Veranstaltungen und gemeinsame Tätigkeiten?

Arbeiten Menschen hauptamtlich hier? Wenn ja, in welchem Umfang? Welche Aufgaben sind das?

Wie viel der Arbeit ist ehrenamtlich? Welche Aufgaben?

Zusammensetzung der Gruppe? Alter, Geschlecht, Kultureller und Bildungshintergrund

Nachbarschaft und Verhältnis?

Wie stabil ist die Gruppe, wie oft kommen Neue dazu?

Appendix 3



Einverständniserklärung zum Interview für eine Masterarbeit im Studiengang “Outdoor Environments for Health and Well-Being” der Schwedischen Landwirtschaftlichen Universität (SLU)

Interviewerin: Laura Engel
Interviewdatum:

Ich bin damit einverstanden, im Rahmen der genannten Masterarbeit an einem Interview teilzunehmen. Ich wurde über das Ziel und den Verlauf des Forschungsprojekts informiert. Ich erkläre mich dazu bereit, dass das Interview aufgezeichnet und transkribiert wird. Die Audiodateien werden spätestens zum Abschluss der Masterarbeit gelöscht. Die Transkripte der Interviews werden anonymisiert.

Meine Teilnahme an der Erhebung und meine Zustimmung zur oben beschriebenen Verwendung der Daten sind freiwillig. Es ist mir jeder Zeit möglich, meine Zustimmung zu widerrufen. Durch Verweigerung oder Widerruf entstehen mir keine Nachteile. Ich habe das Recht auf Auskunft, Berichtigung, Löschung, Einschränkung der Verarbeitung und Widerspruch gegen die weitere Verarbeitung meiner Daten. Unter diesen Bedingungen erkläre ich mich bereit, das Interview zu geben, und bin damit einverstanden, dass es aufgezeichnet, verschriftlicht, anonymisiert und ausgewertet wird.

Ort, Datum, Unterschrift Interviewte_r

Ort, Datum, Unterschrift Interviewerin

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Allotment clubs and community gardens belong to vivid cities



Autumn in a community garden. Picture: Laura Engel

The COVID-19 pandemic shed light on citizen's demands to urban spaces. Allotment clubs and community gardens are urban green community spaces, which provide possibilities to be part of a community and to actively shape the city. Place attachment is one of the reasons why gardeners participate, as a master thesis shows.

Green urban community projects as allotment clubs and community gardens are popular places in cities for people of all backgrounds. Among other aspects, they enable a direct and close connection to food, culture and raise awareness for environmental topics. A master thesis, conducted in allotment clubs and community gardens in two German cities, researches the gardeners' place attachment's impact on projects and their role in the city.

Place attachment to green urban community projects

Project participants show distinct attachment to both the gardens as well as the respective groups, relatively independent of their length of participation. Being part of the projects positively impacts their well-being. Stress-reduction was reported due to being outdoors, getting exercise, being part in a community and having a purpose. In three out of four cases, the project was even mentioned as main support to process the impacts of the COVID-19 caused lockdown in spring 2020.

Municipalities can support project diversity

Place attachment to garden projects involves an interest in maintaining the place and to care about an active community, in the project as well as being part of a local or regional network. Therefore, besides providing green spaces in cities, urban green community projects also are places of citizen participation. One important aspect is the access to a suitable space, with the option of open ended usage. Municipalities can support projects with providing that space. These spaces can be multifunctional used by several projects, which can be interlinked in their interests. By a diversity in offered topics and activities, more citizens can be interested to participate.