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# **Cultivating social interaction in diverse neighbourhoods – one chili at a time**

A case study of Linderud Community Garden

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Urban and Regional Planning

# Preface

This thesis marks the end of my journey to a master's degree in Urban and Regional Planning at Norwegian University of Life Sciences, and hopefully it is only the beginning of putting the knowledge I have gained to life. What I have learned from these years is that planning is complex, yet it poses so many opportunities to create good places and cities. I have over the years developed a love for placemaking and neighbourhood development. As a visible minority with a interest for sustainable food production it was not hard for me to decide on the topic. The questions on how to plan in diverse areas are intricate and was something that I wanted to understand better.

This project is affiliated with the BYFORSK-research project Cultivating Public Spaces (CPS). I would like to give a tremendous thanks to my supervisors: Roberta Cucca for all the good advice and encouraging words, and Melissa Murphy and Katinka Horgen Evensen for great discussions and for having me as a part of CPS. Thanks to NIBR for hosting me at their offices. It has been inspiring to sit amongst researchers, PhD's and other master students. A huge thanks goes to Ina for moral and academic support, and Marie and Hedda for head, shoulder, knees and toes-stretches!

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# Abstract

This thesis looks at how a community garden can support social interaction in diverse neighbourhoods. It draws upon the case of Linderud Community Garden, an urban garden in Oslo. The Norwegian government launched in February 2021 a national strategy for urban agriculture, where one of the goals is to achieve social inclusion through urban agricultural projects. Our cities have become more diverse over the last decades, and many minorities experience discrimination and exclusion based on their background. Social interaction in public space, both fleeting and meaningful encounters, are believed to build tolerance. While the positive social effects of urban agriculture are well supported in the academic literature, there are also evidence of the risks of exclusion and gentrification. The national strategy advocates for an integration of urban agriculture in city planning, yet there is little formal knowledge on how it should be implemented in planning practice. This thesis thus seeks to contribute to the knowledge on community gardens in diverse neighbourhood to inform planning practice.

Through spatial mapping, observation and interviews I have investigated how Linderud Community Garden supports social interaction through how the spatial and social organization affect the use of the garden. I have looked into who the users of the garden are and whether it reflects those who are underrepresented in public outdoor spaces in the neighbourhood.

The results demonstrates that a central location close by elemental public functions allows for frequent visits that can be combined with daily routines. It also illustrates how the function of a publicly accessible green space with social area and as a part of the mobility network attracts different types of users to the space for recreation and promenade, regardless of gardening interest. Furthermore, it shows that the social organization plays a significant role in determining both the gardening and public users. The presence of public users seems to be determined by what type of group the frequenting gardeners represent, whether it be minorities, youth or elderly.

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# 1 INTRODUCTION

## 1.1 Relevance and aim of the study

Urban agriculture, understood as production of food and green structure in cities and towns, is rapidly growing in Norway (The Norwegian Ministries, 2021, p. 4). In February 2021 the state government released a new national strategy for urban agriculture, arguing for more urban agriculture to be integrated in city development (ibid., p. 16). Several local governments have implemented their own strategies for urban agriculture in the past years (Bergen, 2019; Telemark, 2015). In 2019 Oslo municipality adopted the strategy “Sprouting Oslo – room for everyone in the city’s green spaces”, and over the past three years they have given out grants for urban agriculture projects (Oslo municipality, 2019; Oslo municipality, 2021g). However, urban agriculture has not particularly been integrated into the existing planning practice of zoning of the municipality. The implementation of new projects encouraged by grants is thus separated from the formal planning. Even though there is effort to encourage urban agriculture, there exists little formal knowledge on how it should be implemented in planning practice.

One of the goals of the national strategy for urban agriculture is social inclusion. Norway’s population is becoming more diverse (SSB, 2021a; SSB, 2021b), and many experience discrimination and exclusion based on their background (The Norwegian Ministries, 2019). Using urban agriculture as an outdoor space is particularly relevant for people of migrant background in the cities who tend to live in crowded dwellings (Arnesen, 2020). Crowded dwellings reduce the potential for hosting social interaction with others at home, and they are thus dependent on public accessible outdoor spaces to interact with fellow residents. It is believed to have positive health effects to have a diverse social network, both close relations with family and friends, but also trivial relations with neighbours, colleagues or fellow members of an organization (Norwegian Directorate of Health, 2015, p. 26). Consequently, to achieve the overarching goal of social inclusion through urban agriculture, it is necessary to understand how it can create social interaction between fellow residents, including for people of migrant background and other visible minorities.

A community garden as a shared type of urban agriculture is believed to offer an outdoor space for co-presence and social mix that can contribute to overcoming “the fear of the Other” (Ye, 2019, p. 284). The positive effects of community gardens are well visited in the academic literature – amongst them are major proponents of community gardens as a means for social elevation in terms of inclusion and building tolerance (Baker, 2010, p. 322; Shiness et al., 2004, p. 351). On the other hand, some scholars have put forward critique of

community gardens as contributing to exclusion and gentrification and which poses a risk of marginalizing disadvantaged communities such as ethnic minorities (Horst et al., 2017, p. 278). The dividing results of community gardens makes a case for better understanding of the phenomena and how spatial planning can contribute to avoiding negative effects. The risks and conflicts of community gardens are potentially severe, and hence it is crucial to develop our knowledge on the topic when integrating them into planning practice.

This thesis thus seeks to understand *how a community garden can support interaction in a diverse neighbourhood* in terms of spatial and social function. By understanding the use and the placemaking elements, one can advance the effects of the implementation of community garden projects in diverse neighbourhoods. To explore the theories on community garden I have chosen to put it into a practical context by doing a case study on Linderud Community Garden, located in a borough in Oslo with a high level of diversity. I am myself of a minority ethnic origin and a member of this garden, and the case study will consequently be from an insider perspective. This position influences the methods and results, and contributes to both strengths and weaknesses. These will be elaborated in the methodology chapter.

The thesis will start with the following chapter addressing the relevance of the topic further and make out the background for the research agenda.

## 1.2 Background

This thesis focuses on community gardens as a space for interaction. However, it is necessary to introduce urban agriculture as an umbrella term to understand the formal planning strategies before proceeding onwards to the specific use of community gardens. I will in this section first introduce the status and potential of urban agriculture in planning practice, where I also present different academic views on community gardens' effect on diverse neighbourhoods. Further I will elaborate on why we need to plan for public spaces in diverse neighbourhoods.

### 1.2.1 Urban agriculture and planning practice

Urban agriculture, defined as *“agricultural activities located in (urban) or on the fringe (peri-urban) of a city or town, which reflect the local context and aim to enhance urban sustainability”* (Sarker et al., 2019, p. 2) comprises a great variety in shape and function of projects. It can be public or private, on roofs, balconies or on the ground and can be

organized in different ways, such as a Community Supported Agriculture (CSA), an allotment garden (individual plots) or a community garden (shared plots) (The Norwegian Ministries, 2021, p. 7). Urban agriculture has the advantage of potentially improving degraded areas and transforming neighbourhoods through the conversion of urban spaces into gardens with activities. In addition to aesthetic effects, it is argued to have both social and ecological benefits, such as increased access to healthy food, community development, recreation site for individuals and for neighbourhood gatherings, cultural bonding and health impacts, and increase of biodiversity and micro-climate control (Horst et al., 2017, p. 281-285; Lovell, 2010, p. 2500; Poulsen et al., 2017, p. 1412). Hence, urban agriculture is perceived as an attractive way of increasing green spaces in otherwise compact cities.

Urban agriculture has historically not been considerably included in planning practice in Norway. Although the zoning categories “allotment garden”<sup>1</sup> and “allotment garden with construction”<sup>2</sup> as types of urban garden exist, they have not been of substantial use. Out of the 26 allotment gardens registered only three are zoned as “allotment garden” (Lofsrud, Holmlia and Nedre Silkestrå) (Oslo municipality, 2021f; Parselhager, 2021). The other allotment gardens are under the zoning of different types of green spaces such as “public outdoor recreation area” or “park” and are therefore not protected from other uses.

In recent years there has been a change in the approach towards urban agriculture in urban planning. In February 2021 the Norwegian government launched a national strategy for urban agriculture. The aim of the strategy is to facilitate agricultural projects that have the potential to contribute to sustainable development of cities and towns, increase knowledge on sustainable food production and sustainable value creation, as well as business development (The Norwegian Ministries, 2021, p. 11). The strategy argues for the importance of integration of urban agriculture in city planning and development to increase green spaces for humans as well as habitat for biodiversity (ibid., p. 16), with the emphasis on participant-based city development in the establishment of urban agricultural projects. The latter is reasoned in its potential for connecting people across economic, social and cultural backgrounds, and the inhabitant’s ability to inform planners of what is needed in the neighbourhood (ibid.)

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<sup>1</sup> «Parselhage»

<sup>2</sup> «Kolonihage»

Prior to the national urban agriculture strategy, Oslo municipality adopted its own urban agriculture strategy in 2019, and has also had a program for funding urban agricultural projects since 2018 (Oslo municipality, 2021g). One of the main goals of Oslo's strategy is to create meeting places in a sprouting city, with the objective to create a space for meetings across age and culture and make Oslo a more inclusive city (ibid., p. 11). Additionally, it proposes that the green spaces of the city shall be multifunctional with room for different types of activities, which in turn creates attractive living and recreational spaces.

Both strategies promote the implementation of both temporary and permanent urban agricultural projects. However, many community-based urban agricultural projects today are implemented as temporary projects, and there is less effort in establishing permanent projects. This is partly due to the challenging bureaucracy and limitations in zoning practice and the need for human resources and economic investment in infrastructure. The uncertainty of not knowing how permanent a project can be, as a result of not being protected by zoning, limits the investment in establishing a project (McClintock et al., 2012, p. 24-26). These issues can potentially be combated by the national strategy's suggestions to form a guide for urban agriculture to use in local spatial planning and to clarify urban agriculture as a part of the national expectations to regional and local planning. Such a guide is, however, not legally binding. With suggestions to be carried out, it leaves room for uncertainty about whether and how they will be fulfilled. The need for a guide is supported by literature, as Horst et al. (2017, p. 278) argues for planners to *"... embed urban agriculture into long-term planning efforts so that urban agriculture is viewed as a priority, not just a placeholder for future developments of the land"* and to use these efforts to benefit marginalized communities. As a measure planners can increase the amount of land permanently available for urban agriculture. To do so, more spatial knowledge on urban agriculture is needed as there is a lack of experience in urban agriculture and spatial planning.

To limit the thesis, I will focus on community gardens, as it is argued to be socially inclusive and has public potential (Horst et al., 2017, p. 281-283). The simple definition of a community garden is explained as "communal food-growing spaces" (Pearson & Firth, 2012, p. 153). However, further definition is disputed. There is a broad agreement in the literature that it encourages community cooperation and citizen empowerment, has the intentions of reflecting the pride of the participants, and can be a driver for neighbourhood improvement (Firth et al., 2011, p. 565; Shinew et al., 2004, p. 338-339). What kind of improvements and

who these improvements benefit is however unclear, as this can be understood both as the community within the garden and the neighbourhood community. This poses the question of whether it is run *for* the community or *by* the community, or if it just happens to be located in a certain community (Firth et al., 2011, p. 557). Neighbourhood improvements can come in the shape of aesthetic improvements of a degraded space, without necessarily having involved the neighbourhood residents. Considering the lack of a clear definition of community gardens, as they can take multiple forms, this study applies the understanding of a community garden as a garden that is meant to foster a sense of community among the residents in the neighbourhood (Dolley, 2020, p. 151).

### 1.2.2 Planning in diverse neighbourhoods

Urban populations are becoming more diverse due to increased immigration and the introduction of new ethnicities. Fincher et al. (2014, p. 3) defines multicultural diversity in a demographic context as *“the distinctive presence of immigrant groups, arrived in the major countries of immigrant settlement over the last five decades, or to longstanding ethnic and racial differentiations in a nation and its cities”*. Newcomers from the last decades along with second-generation immigrants constitute a diversity of ethnicity, socio-economic status, culture, experience, traditions, religions, and language which can be understood as hyper diversity (Peterson, 2017, p. 1068-1069). These aspects also intersect, making studying and planning for diversity even more complex. However, to limit the scope of the thesis the diversity studied will focus on ethnic minorities, and to an extent gender and age as these will be represented and identifiable.

The complex hyper diverse demography that has developed in the cities poses a challenge for urban planners worldwide in their task of managing the built environment (Fincher et al., 2014, p. 4). The inhabitant's well-being, and the shaping and response to the city life and lived experience of diversity, are highly dependent on planning. Just as how diversity manifests in each place is unique, so are the approaches and policies in planning for diversity. There is nonetheless a common agreement that planning of the public realm will have a great impact on the nature of inter-cultural interaction and solidarity in multicultural cities and plays an important role in building urban civic culture (Fincher et al., 2014, p. 45). Sandercock explains the term civic culture as embracing the shared, common destiny – which in multicultural cities is a heterogeneous public that accepts the right to dignity no matter how different one might be (Sandercock, 1998, p. 198). To build civic culture is thus to build tolerance for each other with the understanding that we share an intertwined fate.

The importance of planning for outdoor shared spaces is especially high in cities with crowded residential areas, as these gather many people and consequently are more diverse and in need of space. Furthermore, the most crowded dwellings are generally habited by immigrants with low-income families (Arnesen, 2020), contributing to diversity in ethnicity, gender and age. In the past decades scholars have developed a common understanding of how both physical and social dynamics in public are essential in building civic culture (Amin, 2008; Oldenburg, 1989; Sandercock, 1998) – the activity in parks, squares, streets and other shared spaces can be seen as collective welfare, where they works as sites for activity, public encounter and the formation of urban civic culture (Amin, 2008, p. 5). Shared spaces that support social mixing advances the possibilities of social engagement and neighbourhood regeneration (Fincher et al., 2014, p. 16) and work as sites for chance encounters and social mix contributing to overcoming “the fear of the Other” (Ye, 2019, p. 284), building more civic tolerance.

On another note, it is important to emphasize that it is not as simple as merely establishing public places that are open for all. Critics question the effects of social mix merely by sharing space. Doing so might cause more harm than inclusion, as it poses the risk of only serving powerful or dominating groups, excluding certain groups and reducing the diversity (Amin, 2008, p. 15). Empirical evidence has shown cases of social mixing reinforcing prejudice (Valentine, 2010, p. 534) or resulting in gentrification (Davidson, 2010), and that social mixing without specific actions to increase social contact between inhabitants does not result in social cohesion (Mugnano & Palvarini, 2013, p. 422). Planning for inter-cultural contact and tolerance therefore needs to be under certain preconditions; where people are experienced as equals, have the potential to become friends in a non-competitive environment and share a common project or goal, and where there is institutional support for these interaction (Fincher et al., 2014; Mugnano & Palvarini, 2013, p. 23). It is further urged that public space policy must have as a principle to promote inclusion and the civic acceptance of “the right of the many”. This means the need to facilitate certain public spaces to certain groups, such as children, women, immigrants, indigenous groups etc. where these are underrepresented in their context (Amin, 2008, p. 15-16; Sandercock, 1998, p. 196-200).

Whether interaction is enough to build social inclusion and a tolerance for diversity is contested by scholars, as there are different levels of interaction. To limit this thesis, I will categorize interaction into two categories: fleeting encounters and meaningful encounters.



One has however to acknowledge that interaction is fluid and are not necessarily easily categorized as either one or the other.

Fleeting encounters occur between individuals who do not know each other, are short-lived, superficial, and usually polite (Peterson, 2017, p. 1072). Proponents of fleeting encounters argue its' effect on creating a sense of familiarity and reducing the fear of the "Other" – where the presence of diversity make it more "commonplace" and thus brings a feeling of belonging and community (Peterson, 2017, p. 1082; Sandercock, 1998, p. 210; Ye, 2019, p. 490). To illustrate the opposite: a place with a homogenous crowd would not attract new groups to join, as they would feel alien amongst the dominant group. Peterson(2017, p. 1082, 1072) further emphasizes how structural and repetitive encounters have the potential to break stereotypes and challenge prejudice – the presence of diversity assists reflection and change, thus making the former stranger less strange. Additionally, he argues for the creation of a sense of community without actual social contact, e.g., through silent presence which creates familiarity and a sense of safety and control. He illustrates this with how people observe each other, casting looks at co-present people to navigate the public life, where direct interaction is unnecessary to feel more comfortable with the diversity that surround us (ibid, p. 1072).

Contradicting these views, Amin (2008, p. 7) warns that fleeting encounters are unpredictable in collective creation, as there are great differences in social experience, expectations, and conduct. He resides from the belief of public space as a site for human recognition as everyday moments and co-presence in a space does not cause intercultural exchange. It thus has no effect on learning to live with difference (Amin, 2002, p. 976). Nonetheless, he agrees that fleeting encounters are an important site for civic becoming (Amin, 2008, p. 22), but argues that it is the meaningful encounters that are needed for the creation of community and coming to terms with difference (Amin, 2002, p. 976). Meaningful encounters contain a certain depth and duration, and spaces that support repetitive and structural encounters are those that can foster friendship across ethnicity (ibid., p. 967).

### 1.3 Research agenda

Despite the extensive literature on community gardens and diversity, I experienced a gap in the understanding of space as a facilitator for the social aspects that are often researched. If urban agriculture is to be more integrated in planning practice, as proposed by the national strategy, more knowledge is needed for planners, especially as spatial planning in many cases is practiced top-down, e.g., through zoning and feasibility studies. The lack of systematic documentation on how a community garden works as a space for social interaction, inspires my main research question:

*How can a community garden support social interaction in diverse neighbourhood?*

Drawing on the case of Linderud Community Garden in the eastern part of Oslo with a high degree of ethnic diversity, I will analyse its effect of the garden for interaction. To answer the main research question, three sub-questions are researched to support the main question:

- 1. Who are the people that interact in Linderud Community Garden and do they reflect the neighbourhood?*
- 2. How does the physical configuration of Linderud Community Garden support social interaction?*
- 3. How does the social organization of Linderud Community Garden support social interaction?*

The first sub-research question is of significance as the goal of a community garden is to build relations and social inclusion. Therefore, considering *who* uses the space explains whether these aspects reflect the diverse population that represents the neighbourhood. The second sub-research question is especially important in regard to physical planning and to understand the access, attraction, and use of the garden site. However, it is to be acknowledged that physical aspects are not the sole reason for what interactions happen on a site and cannot be detached from the managed use of the area, which poses the importance of the third sub-research question. The third sub-research question aims to understand how the social organization affects who uses the garden and what interaction stems from it. The methods that are used to explore the research questions are participant observation, interview and spatial mapping.

## 1.4 Structure of the thesis

The thesis is structured in 6 chapters. Chapter 1 has explained the background for the research agenda and the actuality of community gardens as a means for social inclusion and building tolerance. Chapter 2 will bring forward the theories used to understand the research questions, while Chapter 3 explains the methods used to gather and analyse data. Chapter 4 consists of the case study. It first presents the case and the area it is located in to put the study into a specific context. It then presents the empirical findings that have undergone analysis based on the theories. Chapter 5 discusses the findings to explore the research questions in light of the theories and background. First, the three sub-research questions connected to the case study are discussed. These discussions then make the base for understanding the phenomenon studied for the main research question. Chapter 6 gives some concluding remarks on the thesis and research question.

## 2 THEORETICAL FRAMEWORK

I will in this section elaborate on theories that I will use for the analytical framework. I will first address the role of physical configuration to support interaction, explained through Varna and Tiesdell (2010) theories on macro-design and micro-design. I will also elaborate on the function of comfortable design. I then present Oldenburg's (1989) concept of "third place", which is explained as a concept of a general variety of public places that is "the core setting of informal public life". The final section examines community gardens as a place for interaction.

## 2.1 How can physical configuration support interaction?

Design shapes, conditions, and facilitates our behaviours in the way it connects fellow users (Yaneva, 2009, p. 280). How a garden is designed determines how the users behave. One example of this can be fences in between each plot; this determines how people approach each other, either hindering people to walk to the neighbour, or making them walk around the fence, which reduces the chance of someone walking over. Amin (2008, p. 19) argues that there is a need for change in the socially inclusive urban policies to acknowledge not just the logics of human recognition, but also for the need of understanding how public space is affected by the design of agents, such as infrastructure, traffic rules, spaces for dogs etc.

Urban spaces cater for a broad public and raises complex questions of how to create an inclusive social environment through physical configuration. Adams and Tiesdell (2012) defines a place as successful when it attracts people and encourage them to linger and return. The presence of people increases the possibility of interaction (Varna & Tiesdell, 2010, p. 585). Their presence is dependent on their ability to approach a place, which is determined by the physical configuration's facilitation for mobility and access. Public places that have good interconnectedness have the potential to increase the frequency of visits and potential of interaction (Jacobs, 1961, p. 34-40). Further on, for people to be present they need a reason to go there. A public place needs an activity or to be a place where people feel comfortable and have ownership (Adams & Tiesdell, 2012, p. 16). The following sections elaborate on physical design and physical comfort that increase presence and interaction.

### Design - Physical configuration

Physical elements, their design, and their placement in the shaping of a place can encourage and discourage use (Murphy, 2021, p. 61). It affects how much effort it takes for people to reach and enter a place, as well as how they use it. Varna and Tiesdell (2010, p. 585-585) illustrate the publicness of a place with the terms macro-design and micro-design. The

former understood as the space's relation to the surrounding area beyond the place, and the latter explained as the design of the area within the place.

**Macro-design** is the physical configuration of the area around a place – it determines the connection it has with its surroundings (Varna & Tiesdell, 2010, p. 583). It affects if and how the public can reach the place, and how much effort it takes. Walls, barriers, gates, privatization, and control of territory are factors that affect the accessibility. The physical configuration is categorized in three key qualities:

*Centrality and connectivity* – strategic localization of a place within the movement pattern of the surrounding area gives a greater potential for diverse groups coming together in space and time. The design of a place plays a less important role, if the place is not located in an area that people have the mobility to approach.

*Visual access* – the ability to see into a place and how to approach it, e.g., paths and entrances. If a place is hidden by intervening objects, has a sealed façade or there is a change in level it has a lower visual accessibility.

*Threshold and gateways* – there are symbolic and passive thresholds and gateways that are presented in a less active form, such as changes in the material of the floor, and there are more physical and active thresholds, such as gates and manned checkpoints. These are decision points for a person to approach a site, and hence important in determining how many people enter and use the site. How thresholds are designed can accordingly cause exclusion e.g., a manned entrance can be restraining, and steps as a threshold excludes wheelchair users.

These factors determine whether a place is difficult or easy to find, see and enter.

**Micro-design** is described as the design of the place itself and holds the animation of a place. It is understood as the “degree to which the design of the place supports and meets human needs in public space”, and whether it is used and shared by different individuals. The place can comprise passive engagement, such as people watching, as well as active engagement such as gardening or playing chess. The more people a space holds, the greater are the opportunities for interaction (Varna & Tiesdell, 2010, p. 585). A place that is well animated generates more opportunities for different types of interaction. E.g., how many

and where walkways and entrances are formed and placed determine the possibilities of chance encounters. Too many paths can spread the users and visitors, while few paths can reduce the accessibility, the number of people present and the interaction between them.

### Comfortable design

A space is more used if people feel safe and comfortable, which means that they need to feel that they are allowed and belong there (Adams & Tiesdell, 2012, p. 16-17). Especially if they are to stay in the space for a longer period of time, which often is needed for interaction. People are not encouraged to use a space if they do not feel like they belong there or in the neighbourhood. A feeling of belonging and ownership to a place is triggered by the user having a reason to attend the space. A sense of ownership can further lead to a deeper connection to a space and increase the interactions that occur as more than a single case.

A place that is fitted to the human scale makes people more comfortable – where they do not feel hemmed or overwhelmed (Adams & Tiesdell, 2012, p. 16). Human scales allow for pedestrians to be prioritized rather than vehicles, making activity more visible and increases the chance of encounters. A place is perceived as safer the livelier they are with people present. Squares and streets that have a high frequency of passers-by and users are perceived as safer than deserted places. Places that are comfortable makes people feel at ease, wanting to stay longer and return. Furthermore, places with visual identity helps people remember and identify with places better. For a place to be inclusive, it requires design that is accessible to all users, including disabled, elderly and children.

Regardless of the planned intentions for a place, the atmosphere of comfort and ownership is dependent on the presence of people, and what types of people the present represent. How people use the space negotiates with the space's attributes and promotes or prevent diverse interactions and the potential of a collective public feeling (Murphy, 2021, p. 62). The materiality thus represents how inclusive a space is. Murphy (2021, p. 62) illustrates this with how public spaces that are planned to be for the greater population of a city can cause a strange and unwelcoming feeling for certain group of citizens. For example, excessive control of aesthetics and tidyness that does not allow for others material expression can exclude groups that do not "fit" the planned intentions. This could be a commodified public square where shops have commercialized the space and homeless people do not feel welcome or strict growing guidelines in a garden (Carmona et al., 2010, p. 134, 142).

## 2.2 Third places: Inclusive spaces for informal interaction

The third place is argued by Oldenburg (1989) to be of significance to a neighbourhood if it is to be a good place. While the home is a “first place” and work is a “second place”, the third place is a general term for a great variety of public places that is “the core setting of informal public life” (ibid., p. 16) – where people can gather beyond the realms of home and work. In a home the environment is regular and predictable, while at a workplace the individual is reduced to a single, productive role. A third place offers an unbiased environment where the user to a certain level can control their own role and is usually attended voluntarily.

Oldenburg suggests places like public parks and piazzas, as well as commercial sites like cafés and barbers. These places are unbiased and foster meetings and interactions that are different to those at home or work. These differences come through in the criteria Oldenburg has proposed for the characterization of a third place (ibid. p. 20-42).

A third place needs to be on *neutral ground* where visitors do not feel obligation to the place – in contrast to someone’s home. The presence is under the users’ own control, and they can come and leave as they want – there is no host, and the user can therefore feel home and comfortable. Neutral grounds in a neighbourhood offer places for neighbours to meet outside the home, where it is possible to have informal, or even intimate, relations that would not have occurred naturally in a hosted home.

The second criterion demands a third place to be *inclusive*. Oldenburg understands a third place as an arena where all individuals are made equal – they are all at the same level. For this to happen a place needs to be open for all and not limited by formal membership or exclusiveness. Human beings tend to acquaint themselves with people they find closest to themselves in social rank, which limits the possibilities of diverse interaction. A third place counter these restrictive tendencies and expands the possibilities of encounter by being accessible for the public, and facilitates for an appreciation of others by exhibiting qualities independent of status and differences in the society.

*Conversation* is the main activity that defines a good third place, as it is essential to drive casual interaction. There might be activities that interfere with conversations, but also that supports and encourages it. Gardening can encourage collaboration and interaction over the interest of plants, while it can also be a solitude activity.



A third place should be *accessible and accommodating* at times outside the hours of responsibilities at home, work and school to accommodate the people's need to be social. People come and go as they please and the stays and their frequency vary – some are brief, some are long, some days are missed, and some visit every day periodically. This is possible when there are unplanned activities that are unscheduled, unorganized, and unstructured.

A third place needs *regulars* that frequent the place to make it attractive. People who are familiar contribute to vitality and give the place character. Frequenters who are comfortable increase the hospitality of a place creating a contagious atmosphere for interaction.

Third places have a *low profile* that does not have the intention to impress – it is not elegant. The users do not need to dress up and can come as they are. The low profile and plainness make it comfortable and encourages non-pretentiousness, which in turn promotes the perception of each other as equal. It is a place that can be incorporated in everyday life, as a part of a routine.

Oldenburg further adds the criteria of a *playful mood*. The place contains a witty spirit, regardless of whether it is obvious or subtle. The persistent atmosphere is playful, and joy and acceptance reign over anxiety and alienation.

The last criterion is understood as *a home away from home* – one should feel rooted to the place and a sense of ownership, where one is under the control over the setting. A person is not a guest, but a part of the place.

The concept of third place has been advanced by Dolley (2020, p. 143), who call for more nuances as many criteria works in a continuum and cannot be ticked off as either fulfilled or not. The criteria are fluid and can have an inclusive function despite not fulfilling the criteria as described by Oldenburg's. Dolley illustrates this with how community gardens can have a club-like structure, but still function as a public space and an inclusive third place (ibid, p. 152). She further advocates for a differentiation between *accessibility and accommodation*, where she denotes accessibility as the ability to get to a site and accommodation as the hours one can reside. The distinction between accessibility and accommodation is plausible to use in the understanding of physical design as accessibility is highly dependent on the physical configuration and will thus be used for this theoretical framework.

### 2.3 How can community gardens support interaction?

Scholars readily agree on community gardens' social impact on people and neighbourhoods (Egerer et al., 2019, p. 11; Marcus & Francis, 1998, 3-4). Where this agreement usually ends, however, is on the question of how and who it affects. As community gardens hold various forms and organization and create great potential for diverse interaction (Poulsen et al. 2017 ; Shinew, 2004 ; Agustina and Beilin, 2017), it also poses the risk of conflicts and exclusion due to factors such as exclusive design, fences, or different agendas amongst the users and organizers (Kurtz, 2001, p. 660; Pearson & Firth, 2012, p. 154). It is therefore necessary to understand the concept of community garden through both the spatial and functional organization.

Lovell (2012, p. 2503) urges for multifunctional urban agriculture and proposes numerous functions besides community gardens main undertakings: community socialization and food production. It is suggested to use urban gardens as a part of an *urban green structure*, where the site works as a public green space to enhance aesthetics and well-being in a neighbourhood. It can then contribute to recreation and visual quality. Additionally, the open access increases the opportunity to build agricultural literacy (ibid., p. 2508). The latter would be enhanced if the site is used as an *arena for educational purposes*. Formal education such as public programs and workshops engage youth and people in need of job training, where children and adults learn about gardening, foods, nutrition, cooking and culture. A publicly accessible community garden also serves as a site for informal education through interaction with passers-by (Poulsen et al., 2017, p. 1420). Additionally, a community garden can facilitate the growing of different ethnic vegetables that usually are unavailable at the market, and thus contribute to the site as a *place for embedding cultural heritage*. Agustina and Beilin (2017, p. 447) argue that it can “*provide a space to make the unfamiliar familiar; re-creating the sense of belonging for migrants, either by transplanting the gardening practices from their country of origin, or by creating a connection to the new community*”. Literature suggests that combining functions in a community garden attracts heterogeneous user groups and supports interaction across ethnicity, age and gender (Shinew et al., 2004, Kurtz, 2001, p. 664).

Due to gardening and food production being a skilful and laborious activity that requires continuous commitment throughout the season, co-operation is latent. Through the facilitation of workshops, public programs and social activities people get together to build up a garden. The garden as a common project offers a site for inhabitants to create a bottom-up

landscape where they gather around activities and collectively produce a space catered to their needs and visions (Eizenberg, 2012, p. 779). It makes it possible to participate in the building of a neighbourhood as a common project through planting, tending and harvesting (Baker, 2010, p. 322). Community gardens then have the capacity to change the perceived social capital (Christensen et al., 2019, p. 241; Pearson et al., 2012, p. 555). The trust and respect that builds up among fellow users creates a more inclusive and diverse space where the garden is experienced as a place without socio-economic hierarchy. This in turn lowers the threshold of interactions across socio-economic groups.

The reach of community gardens is shown to go further than the garden site itself. Interactions reasoned in a community garden stretches from one-time conversations to deeper, meaningful community building and neighbourhood revitalization (Lovell, 2010, p. 2508 ; Poulsen et al. 2017). Gardening skills are also shared and learned outside the garden between friends and family (Augustina and Beilin, 2017, p. 445), creating ripples of interaction that extend beyond the garden site.

The use and organization of a community garden dictates the opportunities of interaction to a large extent. The integration of multifunctional use allows community gardens to be a place for inhabitants to infuse the landscape with multiple meanings (Baker, 2004, p. 322) and thus attract diverse groups, increasing the possibilities of encounters.

Ruud and Søholt (2006, p. 29) explain the importance of allotment gardens for minority women, due the lack of public areas for this group to meet others - they are often limited to meeting at parks with other women in the context of childcare and are thus underrepresented in public spaces. It is plausible to adapt these findings for community gardens as well, considering that much of the activity for both gardening types are contributed by individuals voluntarily, where the activity is on their premises, casual and based on common interests (Haavie, 2005).

Even with all the social potential a community garden has, it is limited if a garden is inaccessible for those who are in the most need for such a space. Critics of alternative food systems, including community gardens, have put forward the problem of it being expensive and difficult to access, and thus is unapproachable for the majority of the population (Pearson & Firth, 2012, p. 148). Challenges are also faced in the agenda of the ones involved, between professionals, volunteers and users, which can cause conflicts, especially

with a top-down implementation and management (ibid, p. 148-49). Structure and management in a garden are thus crucial in the creation of inclusiveness, where a bottom-up creation is preferred – which will also avoid the risk of forcing gardening on a community who does not want it (Roman-Alcalá, 2015, p. 2). In contrast to the social effects that many community gardens advocate for, the potential effects can have the opposite effect where property and rent prices increase, as a result of ecological gentrification, and drive away those residents a garden was intended for (Braswell, 2018).

## 2.4 Analytical framework: the design of community garden as a third place

The elaboration on macro- (beyond the place) and micro-design (within the place) explains the importance of design and spatial elements to support interaction. Interaction is however also dependent on the experience of the space. As informed by Oldenburg's third place (1989), Amin (2002, 2008) argues that it is not only the traditional understanding of public space that can serve as a site for the formation of civic culture, which has previously been the common understanding of many scholars. By understanding community gardens as a third place, a place for "informal public life", it can contribute to the building of civic culture through interaction. In table 1 the spatial elements of macro- and micro-design elements are presented in how they correlate with third place criteria. These are supplemented with comfortable design to understand the perception of being there. The third column explains the potential of a community garden to realize the criteria. It is important to not look at each spatial element and criteria isolated, as they all intersect across the table both horizontally and vertically within its own section and creates a synergy that enhances each other. One spatial element can thus fulfil the experience of several criteria. This will be further illustrated in the discussion.

By the use of Linderud Community Garden as a case study I will test how design and the concept of a community garden can contribute to the experience of a community garden as a third place.

Table 1: The table presents an adaptation of the theories to illustrate how physical configuration can fulfill third place criteria (Oldenburg, 1989) and how it can be expressed in a community garden.

Physical configuration	Third place criteria	Community garden
<b>Macro-design</b>		
<b>Centrality and connectivity</b>	Accessible	A community garden should have a central location within the movement pattern of the surrounding area.
<b>Visual access</b>		
<b>Thresholds and gateways</b>	Regulars	This results in more regulars.
<b>Micro-design</b>		
	Accessible Accommodating Inclusive Neutral ground Conversation	Accessibility for the public or for underrepresented groups at any time for inclusiveness and flexibility to meet on a neutral ground and have conversations over gardening and co-operation.
<b>Entrances</b>		
<b>Pathways</b>	Regulars A home away from home	Gardening as a continuous activity demands that gardeners become regulars and feel rooted, as they have tasks and plots they feel ownership to. Regulars create familiarity resulting in a home away from home.
<b>Activity facilitation</b>		
<b>Social spots</b>	Low profile	Community gardens are practically organized after the crop's needs and changes with seasons. People can come as they are.
	Playful mood	Gardeners and visitors are there voluntarily, and interactions are usually joyous.
<b>Comfortable design</b>		
<b>Human scale</b>		
<b>Visual identity</b>	Accessible Accommodating Inclusive Low profile	The perception of the garden being designed for comfort, by not being too big, being adapted for handicapped as well as others makes the place inclusive. The visual identity of a rough community garden creates a low profile that is not intimidating.
<b>Universal design</b>		
<b>Presence of people</b>		

# 3 METHODOLOGY

This thesis is conducted as a qualitative study with case study to explore the research questions. Qualitative studies are suitable as it acknowledges the multiple meanings and perspectives of the phenomenon in research, rather than seeking one overriding interpretation (Winchester & Rofe, 2016, p. 8). This approach allows for a parallel development of research question, data collection and analysis and to go back and forth in a circular process to get in depth of the subject (Hellevik, 2011, p. 110).

This section will explain the use of a case study, how the case was picked, elaborate on the methods for data collection: spatial mapping, participant observation and semi-structured interviews, before discussing methodological implications.

### 3.1 Case study

Case study has become a well-established methodology in social science, as it gives the opportunity to understand complex social phenomena within real-life contexts (Yin, 2018, p. 15). The methodology allows for an intensive study to explore in-depth nuances, the contextual influences, and explanations of a phenomenon. Theoretical concepts are not inherent in real life situations, and a case study could provide analysis to validate, falsify or develop theory with real life context (Baxter, 2016, p. 130-131). Referring to case studies are an integral part of planning and urbanism, and it is plausible to refer to case studies and build upon patterns and experiences (Ghafouri, 2020, p. 28).

The use of a case study for this thesis is beneficial as it allows the research to preserve and understand more comprehensive characteristics such as behaviour in the space of community gardens. How one behaves develops through time, along with the area's dynamics and constant change of physical and demographic surroundings. Case study is therefore a useful tool to understand the contemporary event (Yin, 2018, p. 15). By the use of a case study I will be able to test how design can contribute to the experience of a community garden as a third place.

Furthermore, a case study is favourable as it allows the research to be flexible on the methods used, as for the combination of different methods and the application of it along the research process. The use of complementing methods and the possibility to supplement with data along the process generates details with higher validity. This thesis collects data through interviews, observation and spatial mapping combined to get a variety of perspectives to complement each data collection method.

### Selecting the case

This thesis uses a single-case study, as the objective is to catch the circumstances and conditions of the social interaction in a community garden as a part of a diverse neighbourhood. Research on how interactions occur can confirm, challenge or extend theories (Yin, 2018, p. 49) on inter-ethnic interaction in community gardens. The case represents interaction at a community garden as a common phenomenon for social integration and can draw useful understandings for other community gardens (Yin, 2018, p. 50). However, no cases have identical influencing factors, and one single study's result cannot uncritically be applied to another case (Baxter, 2016). Results may nevertheless be transferable to other cases and contribute to an explanation of similar phenomena.

As the time scope and length for this master thesis is limited, the choice of a single case study further allows the research to go in-depth and focus on the contextualized understanding of the case, which is necessary as the research encompasses human interaction, experience, and behaviour.

I became a member of Linderud Community Garden three months before the research began, out of personal interest without an aim of studying the garden. Due to my familiarity with the garden, it was an apparent case option. However, before deciding on the case, several alternatives were mapped out to base the selection on a clear foundation. A mapping of Oslo's diverse neighbourhood and urban gardens pointed out several alternatives. Most of these were allotment gardens where individual members paid for a personal allotment each. Linderud community garden was of further interest as it did not have any personal allotments and has set goals for community building in the garden and for the neighborhood as a whole (Nabolagshager, 2021). Being an insider increases the rates of attaining data and reduces the risk of vulnerable research, as it is a single case study with "all the eggs in one basket" (Yin, 2018, p. 61). After planning a research design and a consideration of the positive outcomes of a detailed understanding of the contextualization, the in-depth effects were found to outweigh the risks associated with this approach.



## 3.2 Data collection

### 3.2.1 Spatial mapping

Mapping the spatial features are useful to understand how the space affects the actions that occur. A space can traditionally be understood as Euclidean, as something that is measurable and observable (Parker & Doak, 2012, p. 158). In planning and the understanding of actions and interactions, it is important to understand the functions of the socially constructed space that is created through habitation, (re)development, incidents, and memories (ibid., p. 159). A place then becomes an important holder and stimulus for community and affective local relations, and by understanding the place and its functions it is possible to understand the interactions undertaken through the response to different features.

By mapping and analysing the spatial features in the area in and around the garden, I gained deeper understanding of the mobility and actions conveyed that create opportunity for interactions. I have in the spatial mapping used aerial photos and maps as the main source. Aerial sources give an insightful overview of objects in the area, that cannot be sighted or put into context when approached in human scale on site. The objects mapped were cross checked by physically visiting them on site to understand and experience them in their everyday use, e.g., experienced distances, scales etc. to understand the social aspects of their features.

### 3.2.2 Participant observation

Observation serves as a source of evidence where the goal is to develop understanding by being part of the spontaneity of everyday interactions (Kearns, 2016, p. 314-317). The aim of observation is to understand which interactions occur with who in the garden. Why these interactions occur is sometimes apparent in the observations but might also be limited. Observations are however a good supplement to the other data collection methods. Distinguishing diversity during observation poses some challenges. For this thesis I have chosen to do observation based on visible minorities and language fluency. The challenges and choices made for studying diversity are further discussed in a later section.

The observation done has been participant observation (Yin, 2018, p. 123-124), as I am a member of the garden myself I take part socially and spatially in the actions on site (Kearns, 2016, p. 320). Furthermore, I am a second-generation immigrant of colour, making all

interactions intercultural. Being a participant observer gives distinctive opportunities. Compared to an external observer, my viewpoint in this research provide a perspective of the reality that can be argued is invaluable, as it contributes to a more accurate representation of a case and its phenomenon (Yin, 2018, p. 124).

*Table 2: Overview of the observations conducted.*

<b>Month/day</b>	<b>Time</b>	<b>Happening</b>	<b>Reason to observe</b>
<b>27th July</b>	19-20	Public gardening event	Pilot observation.
<b>2nd August</b>	19-21	Evening observation. No organized activities.	Interaction between potential gardeners, recreation on site and people on promenade in the garden
<b>15th august</b>	14:30 – 16:00	Open summer party for the whole neighbourhood.	Interactions of the inhabitants participating at the event.
<b>2nd September</b>	15-18	Evening observation. Volunteer workshop.	Interaction between gardeners, recreation on site and people on promenade in the garden
<b>15th September</b>	10-13	Morning/lunch observation. No organized activities.	Interaction between potential gardeners, passersby* and if people use the space during lunch time.
<b>14th October</b>	16-18	Afternoon observation. No organized activities.	Interaction between potential gardeners, recreation on site and promenades.
<b>16th October</b>	12-16	Volunteer workshop and thanksgiving party for members of CSA	Interactions of the participants at the event.

\*Passersby who use the shortcut and walks through the garden.

One pilot observation was done early in the research period to get an overview of potential activities to register. There were conducted six logged observations of a total 16,5 hours from August to October. These were planned at distinctive times of the day in order to reflect different situations and use (see table 2). The observations were combined with volunteer gardening and events arranged by the garden. One observation was conducted during lunchtime, while the rest of the observations done outside of events were conducted in the evening. As a participant observer being a member of the garden, it allowed me to place

myself in situations where I could get a systematic understanding of the place (Kearns, 2016, p. 318). Being a member granted me in this case an invitation to an event arranged by and mainly for members of one of the biggest shareholders of the garden (the CSA). The observations can be separated into three categories: at volunteer workshops, at events, and everyday situations. These were all equally valuable in their own way and provided different types of information, due to the different activities happening and people present at the different occasions. Notes were taken during the observation and were written down in detail following each observation.

### The challenge of defining and studying diversity

While statistical numbers in this thesis includes all minorities that are non-Norwegian, this thesis focuses on visible minorities in the data collection. The statistics include all non-Norwegians as it would be inappropriate to differentiate and exclude nationalities and regions when they themselves have various appearances. However, as one of the reasons for interaction is to create civic culture and racial tolerance, appearance as a visible minority is the essential feature, regardless of country of origin, economical or sociocultural status. A visible minority can be understood as those who resemble those born in, or with parents born in, Africa, Asia, Latin America or Southeastern Europe and are distinguished by physical appearance (Gustafsson et al., 2017) from the ethnic Norwegian and resembling appearance. Whilst other marginalized groups can also be identified as visible minorities (such as gender non-conforming people) this research focuses on racial minorities in particular. Although this thesis draws a limitation in the data collection for visible minorities, it does not reject the fact that there are many who are not of visible minorities that are subject to racial stigma, such as Sami or Polish people (Goździak & Main, 2021; Hansen et al., 2008).

### 3.2.3 Interview

#### Semi-structured interviews

In-depth semi-structured interviews allows for investigation of complex behaviours and motivations, and provides a diversity of meaning and experiences (Dunn, 2016, p. 150). This is especially useful in this case, as experiences can vary significantly between people of different cultures. The use of interviews is especially valuable when working with diverse cultures, as it is a face-to-face dialogue. This allows the informant to openly respond and potentially tell me if a question is misplaced, or to get my opinions and presumptions verified or scrutinized (ibid., p. 151). Furthermore, the flexibility of a semi-structured interview makes

it possible for the interview to be taken or redirected to a direction that uncovers issues that have not previously been mapped.

The aim of doing interviews was to get an understanding how the space is perceived and used throughout the year. By interviewing coordinators, who are also users, I got to know the motivations and plans for the garden, their perception of using the garden and their insight of the broader users' experiences. I also wanted to know what kind of interactions people had in the garden, who they interact with, how they use the space, their perception of the garden in the neighbourhood, and their motivation for being there, e.g., whether for the food production or the social opportunities. By doing interviews it was possible to obtain data that regards events and actions from a broader spectre of time than the data collected from observation.

3 in-depth interviews were conducted for this thesis. The semi-structured interviews followed an interview guide with open ended questions (see appendix 1). The interview guide was made as a guideline to make sure the data needed was asked for within the time frame of the interview. One pilot interview was conducted before interviewing the informants to secure that the questions were understandable and met the necessary requirements. As it was a semi-structured interview, the guide was not followed strictly. There was a focus on keeping the informant comfortable and to not disrupt the talking unless the person got into non-relevant topics. This way, it was possible to discover information that was not foreseen.

The interviews had a time frame of 30 – 45 minutes and were conducted at various locations. The garden was always proposed as an alternative but was not the most practical option for any the informants. The interviews were conducted indoors; at a café, at a library and one was conducted online. The interviews were recorded which made it possible to stay focused on the informant instead of taking notes. The recordings were used to take thorough notes afterwards to analyse the data.

### Sample

Three different types of coordinators were interviewed for the study. The different types of coordinators interviewed represented different age, gender, ethnicities, and organizations, and thus represented a broad spectrum of users. One of the coordinators had overall responsibility for the garden, one for the local community, and one represented one of the local social organizations in the garden. By interviewing different types of coordinators, I got different insight, due to their insight on different user groups subject to their responsibilities.

The sample was recruited through personal approach at events and with the snowball effect. Two informants were named by others on their own initiative, through informal conversations and interviews. Key persons were asked for persons matching the requirements for the sample. For the following sections the interview objects will be referred to as I1, I2 and I3.

In the beginning the sample was intended to represent a broad spectre of roles in the garden, and with a wide representation of age, sex, and ethnicity. These three aspects were equally important to get a representative image of how diverse cultural groups interact. As the time scope of the thesis and numbers of interviews were limited, I searched for informants that were active users, had some network in the garden and knowledge of other user's apparent use and perception as well as their own experience. However, after approaching numerous users for interviews, they all gave negative responses. I approached other users as well, without success. One of the potential interview objects was however very welcoming when we met at the garden by coincidence, and engaged in a talk, but did not want to formalize it in a recorded interview. Many perspectives from users have thus come forward through informal conversations (see next section). Youth were also wanted in the sample but were not available to reach as the organizations did not want to give out personal and contact information due to GDPR. Their perceptions are nevertheless expressed through the coordinators as second-hand information. It should be noted that the information from the coordinators has undergone their personal interpretation before being presented to me and thus affects the analysis. Their interpretation can be biased by their motivations and perspectives, and I was thus aware in the interviews to ask opposing questions.

### Informal conversations

Informal conversations often occurred due to my presence in the garden, leading to interaction with both members and non-members. These conversations have provided valuable insight in the dynamics and interactions of the garden. Informal conversations created an environment of more informality and the informants elaborated on many topics that may not have been revealed through a formal interview. Questions that were relevant for the data collection were asked when suitable. In-depth questions were however not always appropriate or were talked away by the informant. Language barriers were also a factor that steered the conversations and limited the possibilities of getting specific data. Nevertheless, informal conversation supplemented the data collection with important personal experiences from many perspectives, even with the risk of these conversations being limited and dependent on the informants' answers and their interests.

Table 3 shows the spread of diversity of the people that were talked to. The table includes both informal conversations and in-depth interview objects. Some of the conversations were in groups and the conversation objects varied in their contribution. Where certain people in groups could contribute with a couple of sentences, other one-to-one informal conversation could last from 5 – 30 minutes. The ages varied from 22 – 60 years old.

*Table 3: The table shows the diversity of people who contributed with in-depth interviews and informal conversations. The categories are based on visible minority and roughly classified to remain anonymity.*

Origin	Female	Male
South-Asia	4	1
Central and South America	1	1
North America	1	-
Middle East	1	-
European	4	3
Norwegian	12	3
<b>Total</b>	<b>23</b>	<b>8</b>

### 3.3 Analysis strategy

The following figure 1 illustrates the research structure. To answer the research question, three sub-research questions were explored to put the phenomenon into a specific context. The design theories that support third place were then tested through the methods presented in this chapter. These methods produced data for further analysis.

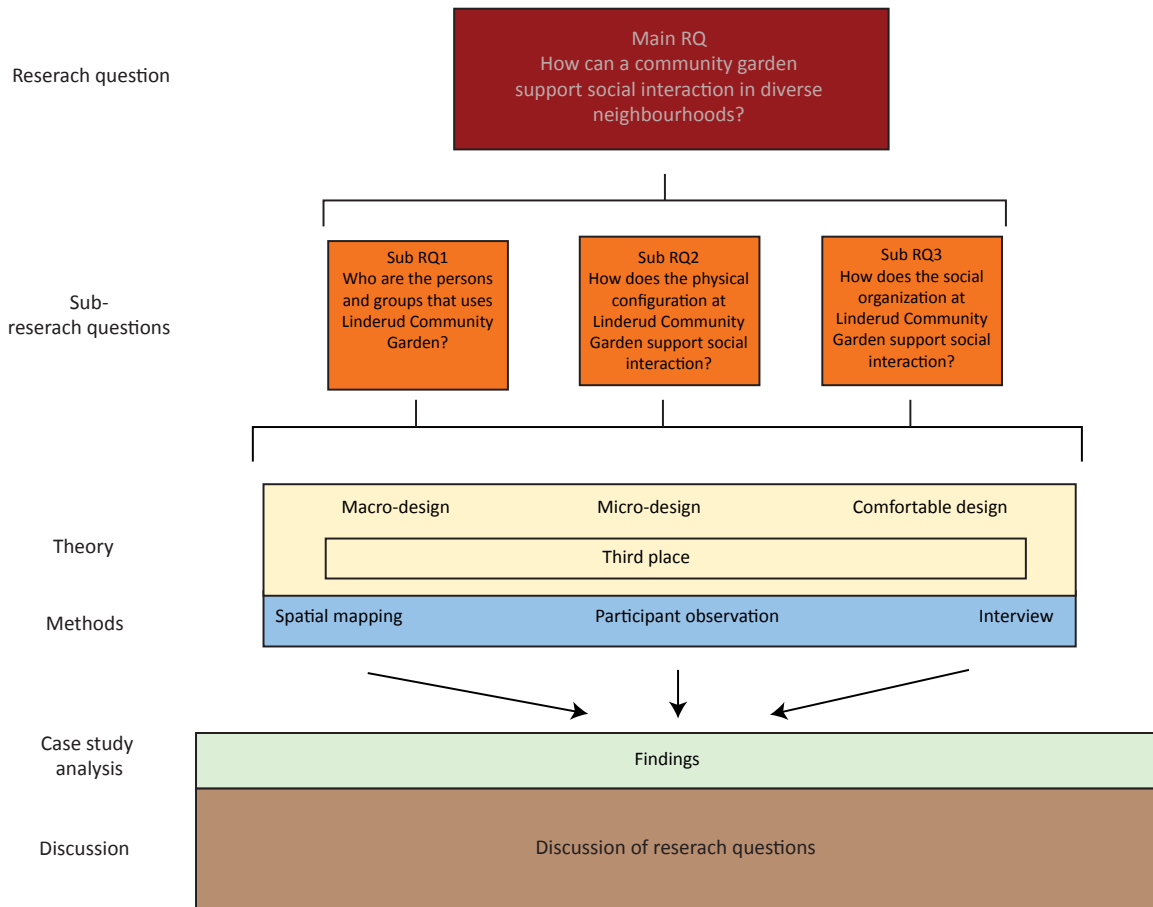


Figure 1: The figure illustrates the research structure.

The first step of the analysis was done by categorizing the data from all the methods into the relevant themes: macro-design, micro-design, and comfortable design. The three parts together sought to understand the garden as a third place. During the categorization more reflexive analysis was undergone based on the research questions. All the data was reviewed thoroughly, while only the relevant data and findings are presented. Some of the data collected were not relevant to the final analysis, as participant observation involved taking part of a daily life and I could not account for the happenings and the conversations had. The empirical findings presented are thus findings that have already undergone analysis based on all the data collected. The analysis of the data will also be based on previous findings on Linderud, amongst them a site analysis for District Bjerke (Bydel Bjerke, 2020). This information supplies the data with a wider context. Lastly, the findings are used to discuss the research questions.

### 3.4 Methodological issues

#### Critical reflexivity

Kearns (2016, p. 322) argues that the ideal position to be in is in-between an “insider” and an “outsider”. I became a member three months and had not become very familiar with the garden and all its members and organizations by the time the study started. At the same time, I had got to know a few faces and became familiar with some of the gardening routines, without having established a significant character or presence that could have affected others’ view of me at the point when the research started. Furthermore, I did not live in the neighbourhood and was not personally known to anyone. Anyone who could recognize me, knew me through community gardening, which in this case made me a familiar face from a common activity, unbiased by other aspects of my private life. As an insider, both the information I collect and my interpretations of it are arguably more valid than those of an outsider. People are more likely to talk to me freely, and I am more likely to understand what they are saying, because I share their outlook on the world (Kearns, p. 40). It is also to be noted that one is not either an outsider nor an insider, as people always overlap in roles, such as in gender, race, social and cultural background, and other types of characteristics (ibid.).

Being an “insider” conveys a risk of bias. A participant-observer is likely to follow a common, known phenomenon and become a supporter of the group studied (Yin, 2018, p. 125). However, this risk is reduced as I have not been a member for long and am not fully embedded in the existing culture; I am thus not familiar with known phenomena. Another risk is of the participant role requiring too much attention in the activities relative to the passive observer role, and therefore be inadequate to take notes. However, the size and design of the garden (see figure 12) allow me as an observer to have an overview of the whole field and to observe interaction happening all over the site, while the activities I was conducting were flexible where I could stop at any time and were not a critical restraint for the observation. The risks were further reduced by strategically planning what to observe at the different times.

It is necessary to mention that participant observation with my spatial presence affects how the space is perceived and how people behave; Whether they come in, how they move in the garden, if they feel like approaching anyone etc. My presence can make people feel like the garden is for everyone, or it might feel excluding for some people. This impression is



dependent on my actions, but is also highly determined by others present at the garden and the ongoing actions, e.g., whether I am or those others present are gardening, promenading, having lunch, being social together or spread out individually or in groups.

The time scope of this thesis and the garden as a seasonal based place has limited the time frame the data collection could be conducted to August - October. Observation has thus not included spring, which is an important season for preparing the garden for cultivation and as a season when people start being more outdoors. The early summer months of June and July as peak outdoor season has also not been registered. Still, data on activities in the garden throughout the year has come forward through interviews.

In the planning phase of the thesis, early summer 2021, Oslo was in a lockdown due to the Covid-19 pandemic and people had to keep social distance. This situation posed questions of which methods were conductible and when, as there was uncertainty of when it was possible to meet people who were not in the same cohort and people personally had different attitudes towards meeting strangers regardless of national regulations. This affected the planning of the research questions and the research design, where most of the data was decided to be collected through observation and spatial mapping.

### Reliability

Reliability, understood as the stability and trustworthiness of methods and findings, is desired to minimize errors and biases in the study (Mansvelt & Berg, 2016, p. 409; Yin, 2018, p. 46). By making the study as consequent as possible with an objective where the procedures can be reconstructed and get the same results, the reliability rises. A case study of a place is however never completely transferable as it changes with time and is affected by its users, and this type of study is therefore situation specific to the time it was researched. It is however an important principle to be reflexive of one's own position and the reliability it produces.

I have in this study made sure of thorough documentation of the case study; data from observation and interviews have been consequently logged immediately after each session to get as accurate description as possible and the presentation is aimed to be precise. The interview guides were made with the thought of as unbiased questions as possible – with the aim of getting answers that would have been the same regardless of interviewer.

Nonetheless, semi-structured interviews are by concept flexible. Any adjustments done during the interviews will always be shaped by the researcher's understanding and is biased

from one's knowledge. The formulation of the first questions were aimed to be neutral to get open answers from the interview objects, where the object did not get the perception of any "right" or "wrong" answers. More specific questions were presented towards the end to get the necessary data. Completely eliminating bias is impossible in qualitative studies, but it was followed as an important principle throughout the work to strengthen the reliability of the case study.

### Validity

The accuracy, *validity*, of the results relies on the collected data and interpretations of them being relevant for the research agenda. Different aspects that influence the result also need to be considered, as the validity is affected by the fact that there are multiple truths in a real world case study (Mansvelt & Berg, 2016, p. 407). By describing an experience, event or action comprehensively, the reader can get a strengthened validation of the context interpreted deliberate and comprehensive description that takes the reader to the core of an experience (Geez 1973 in Mansvelt & Berg, 2016, p. 410).

My position as a member and as a person of color, in addition to preconditioned abilities, knowledge and experiences, affects the interpretation of the happenings observed, the interview material and spatial understanding. For example, walkability aspects such as distance and readability of streets are perceived from my view as a physically and mentally able bodied person, who will not have all the perspectives of others such as people with disabilities, kids or elderly. I have strived to approach interpretations as objective as possible by asking questions of the opposite of my own perceptions and reflecting on the validity. In the interviews it was important not to ask leading questions that were shaped by my position. I have strived for transparency through being reflexive of my position and perspectives, as well as acknowledging and making explicit choices that can have influenced the interpretation of the case study. Additional voices from literature have been used to nuance the study. Transparency and objectivity is however never completely achievable, but conscious reflexive writing leads to a study that is open for scrutiny (Mansvelt & Berg, 2016, p. 414). The data will always be somewhat biased, but it is ultimately the total *sense* of the aspects of social interaction in an urban garden that I am trying to understand. That sense is what matters in term of interpretation, as will be reasoned in chapter 5 and 6.

### 3.4 Ethics

The ethical considerations for this thesis have been considered and guidelines from Norwegian centre for research data (NSD) on anonymity, consent and storage of data are followed. The research was informed in oral to persons I was in personal contact with on one to one or in smaller groups, and in written email to the main coordinators of the garden. I was also aware that this could affect the people's behaviour and the data, but I saw it as an important ethical concern to inform about the thesis. Regarding bigger groups such as events, the garden was perceived as a public space where consent is not required. These events gather big crowds and the observed objects are nominally "participants" that would have been difficult to reach back to return the research results to (Kearns, 2016, p. 329). This also applies to visitors and fleeting encounters that happen in the garden at other times of observation.

# 4 CASE STUDY

This chapter will present the case study of Linderud Community Garden. The first section gives a descriptive introduction of the inhabitant diversity and community gardens in Oslo to put the case into a broader context. The next section elaborates on the demography, housing typology and plans for Linderud borough. Here I will also provide a description of the historical background of Linderud Community Garden.

After the description of the case area the empirical findings of the case study is presented. These are separated into four themes. *Macro-design* explores the garden according to the surrounding area to understand the accessibility of the garden for the inhabitants. *Micro-design* looks at how the site itself and the design of it facilitates interaction. *Comfortable design* addresses the perceived comfort of a space.

#### 4.1 Diversity and community gardens in Oslo

The immigrant population in Norway has steadily increased for the past decades. The past 15 years (2006 - 2021) immigrants, including children born in Norway by non-Norwegian parents, have increased in Norway with 10,2 % (SSB, 2021a; SSB, 2021b). The same increase is reflected in the population of Oslo. In 2006 the immigrant population made up 23% of the city's population, while today the immigrant population is at 33,74 % (ibid). This number is predicted to make out 40 % – 50% of the city's population in 2040 (Texmon, 2012, p. 44).

The following maps show the concentration of multicultural diversity and the density of people living in crowded to be in the eastern part of Oslo. These are also the most densely built neighbourhoods with high rises built in the 60's to meet the housing needs of the fast growing population in Oslo that had emerged in the early 1900 (Roede, 2016, p. 260-262). Today these neighbourhoods have some of the city's most crowded dwellings due to high levels of immigrants with low-income living in the area, comprising larger family households (Arnesen, 2020).

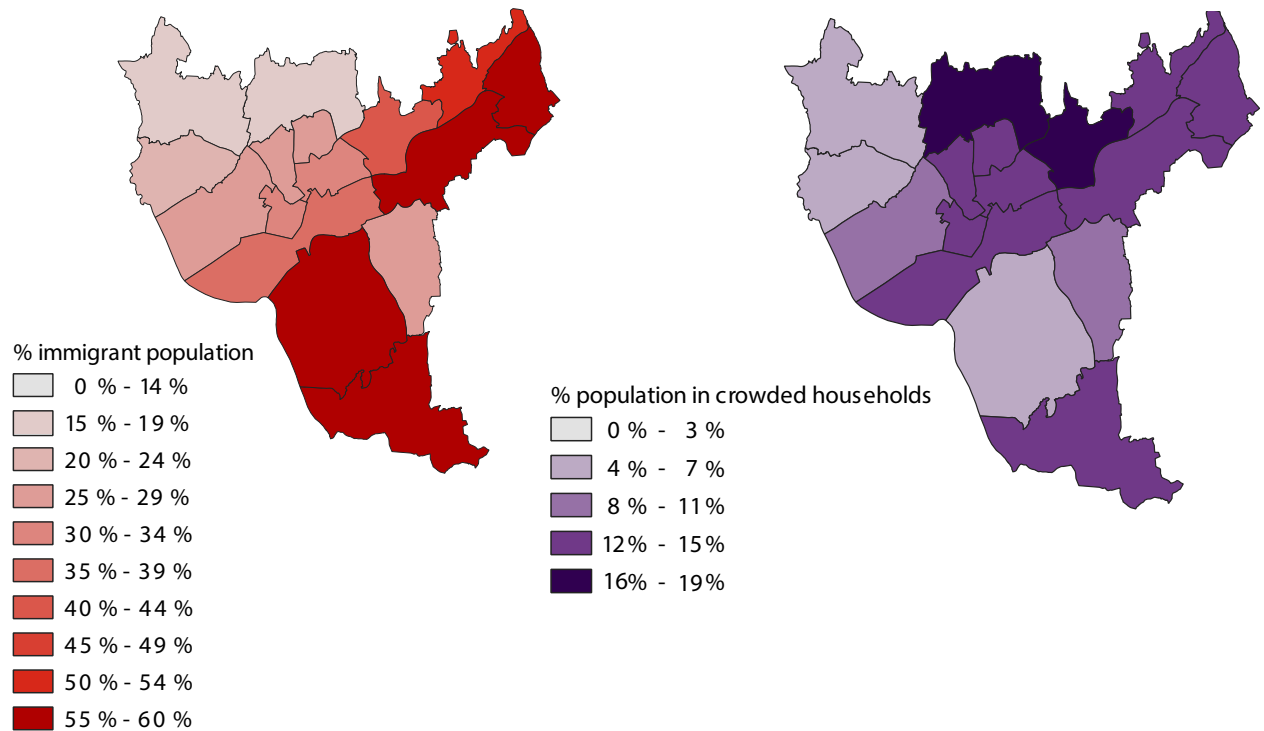


Figure 2(left) and 3(right): The figures illustrate the density of immigrants and crowded dwellings in the different districts of Oslo. (Authors work based on information from Oslo municipality, 2021c and 2021d).

Potential effects of crowded dwellings are residents who do not thrive in their own home wanting to move, children being limited in their lives having no calm space to do homework and facing challenges to bring friends home for visits and play (Oslo municipality, 2021e). Altogether are outdoor public spaces especially important in neighbourhoods with crowded dwellings, as they enhance the possibility for interaction with fellow neighbours and increase well-being. The municipal master plan vision is to create a city that is “... greener, warmer, more creating and have room for everyone.” (Oslo municipality, 2018, p. 4). Some of the efforts suggested to achieve the vision have been put forward in two notions: more green meeting places with various activities and qualities, that are accessible and safe for everyone (p. 21) and enough local public meeting places that have different functions (p. 34-35). In line with Oslo municipality’s strategy for urban gardening, both notions are possible to carry out at once through the establishment of community gardens. This should especially be focused on crowded neighbourhoods where public meeting places are of particular importance in facilitating interaction.

Community garden as a means to encourage outdoor lingering, diverse interaction and community building is previously explored. Today Oslo has 5 community gardens that are publicly accessible. This map includes community gardens, meaning gardens that are mainly shared by organizations, institutions etc. and not individuals, though some of the gardens have a section for individual allotments as well.

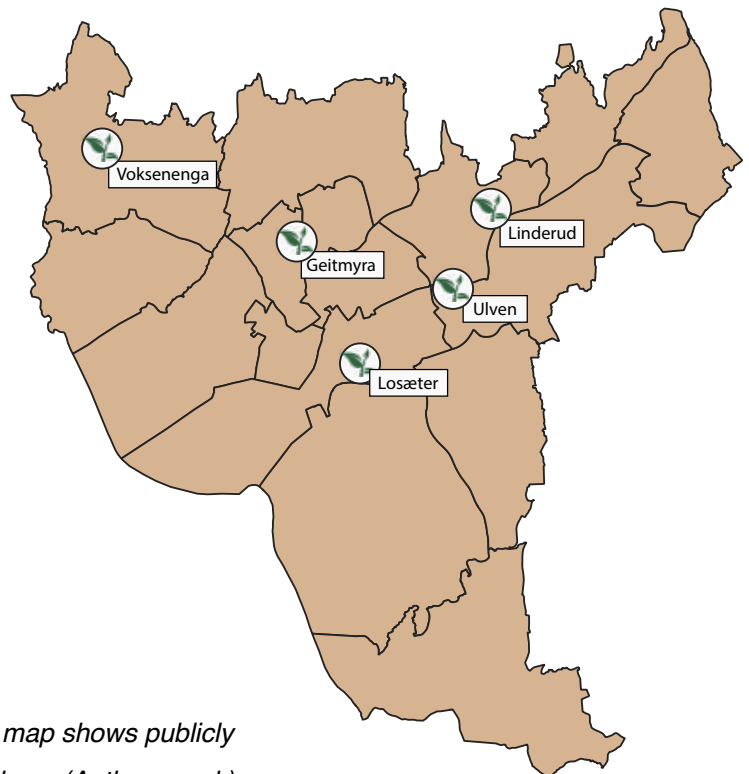


Figure 4: The map shows publicly accessible community gardens. (Authors work).

#### 4.2 Linderud borough

The case Linderud Community Garden is located in Bjerke district northeast in Oslo municipality. Bjerke is today the district in Oslo with the highest share of crowded dwellings in Oslo, defined as housing with less than 20 m<sup>2</sup> per person (Oslo municipality, 2021g). There are huge variations in the housing types and density in-between the districts boroughs - 80% houses in the borough Ulven, and 80% apartments in Linderud (Bydel Bjerke, 2020). I will thus further on focus on Linderud borough where the case is located, rather than the whole district.



Figure 5: Linderud borough in Bjerke district (purple) is located northeast in Oslo. (Authors work. Map source: norgebilder.no)



The housing typology in Linderud mainly consists of three typologies: high rises with 12-13 stories, 4 stories apartment blocks and terraced housing. While there are a few fields of detached housing, it is the three mentioned that are dominant. Linderud is the borough in district Bjerke that has the most apartment blocks and high rises, and has a high amount even compared to the neighbouring dense districts of Groruddalen as well as in comparison to the rest of Oslo (Johannessen & Kvinge, 2010, p. 9-13). The area in between the high rises and apartment blocks consists of private green spaces belonging to the respective buildings. These areas are spacious and light. The areas are mainly cultivated as lawns with simple or no furniture. By the high rises there is a playground with simple structures.



*Photo 1: High rises in Linderud. (Photo: author).*

Linderud covers 7063 of the population (Oslo municipality, 2021b). The borough has had a steady population growth through the years, varying from an increase of 0,2 % - 3,9 %. This trend seems to continue, if not increase, as the past two years from 2019 to 2021 have shown an irregular vast increase of 5,8 % to 7,3 %. As there has not been any recent building of new housing in the area, it can be concluded that the dwellings have become more crowded, and people live with less space.



The trend over the past two decades has been an increase in the immigrant population of Linderud (Oslo municipality, 2021d). The demographic of the borough is of the more ethnic diverse in Oslo, with 55 % of the population consisting of immigrants, either first- or second-generation. The majority of the nationalities that are represented are from Poland, Pakistan, Iraq, Somalia, Sri Lanka, Bulgaria, India, Turkey, Vietnam and Morocco. I have chosen to include second generation immigrants, as many of these are of visible minorities and often live in dense conditions, considering that dense housing conditions in the neighbourhood often correlates with low-income households (Arnesen, 2020). The borough has a 187 % higher percentage of low-income households with children compared to the rest of Oslo, and 158 % more persons live in dense housing than the rest of Oslo (Oslo municipality, 2021c). Over one third, 34,7% of the borough's population are under the category of crowded living conditions (Oslo municipality, 2017, p. 5).

Few of the residents above 60 years old are immigrants (Johannessen & Kvinge, 2010, p. 30). The percentage of elderly over 60 years old in Linderud is approximately at the same level as the rest of Oslo, at 16 % (Oslo municipality, 2021a). The majority of these resides in central Linderud close to the social functions, such as the mall and public transport, which can be understood as a correlation to elderly choosing to live in the high rises with elevators, rather than the apartment blocks without elevators (Johannessen & Kvinge, 2010, p. 26).

The percentage of children and youth between 0-16 years old in Linderud is 22 %, above the Oslo average of 18 % (Oslo municipality, 2021a). The percentage of the persons under 16 years old that are immigrants or have one or two immigrant parents is 77%, above Oslo's percentage on 53,8 % (Oslo municipality, 2021d). Within 800 meters aerial distance from Linderud gård and the central Linderud there are 13 kindergartens, one primary school, two combined primary and secondary schools and one high school.

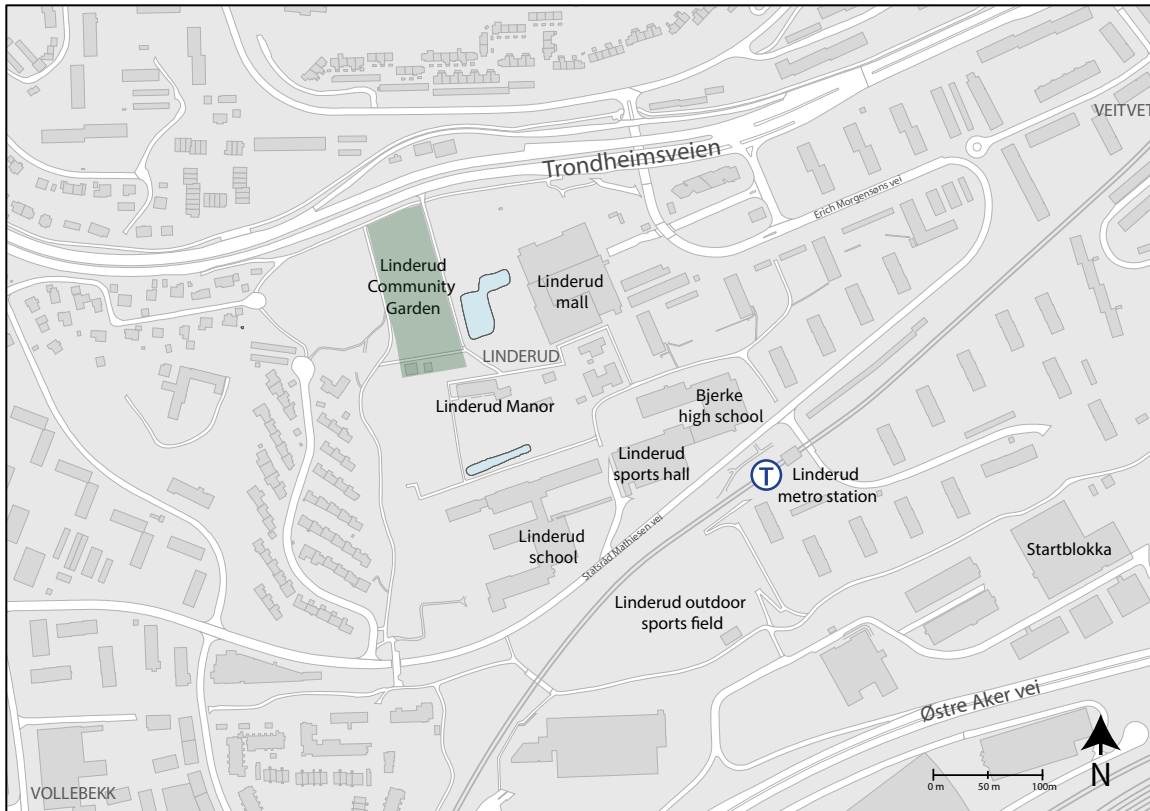


Figure 6: Overview of Linderud neighbourhood with Linderud Community Garden marked out. (Authors work. Map source: Geovekst).

### Neighbourhood development program for Linderud, Sletteløkka and Veitvet

In 2017 the municipality put forward a ten-year strategy plan for the neighbourhoods Linderud, Sletteløkka and Veitvet<sup>3</sup>(Oslo municipality, 2017) to collaborate with the residents to create long-lasting social and physical improvements in their local environment. The strategy report states that the residential environment is fragmented and that there is little interaction between the residents. Many reside in the area only for a short period of time. It further points to the lack of meeting places. On an agreement scale from 1-5 where 1 is disagree and 5 is agree, 50% answered 3 or below on whether they agreed that Linderud had nice meeting places (ibid, p. 51).

Three main goals are drawn in the strategy: 1) participation and engagement – to encourage the residents to take part in the development of their neighbourhood; 2) Living conditions and living environment – to create safe living conditions of quality, good meeting places where neighbours can meet and take part in the creation of a good neighbourhood and; 3) Physical

<sup>3</sup> Norwegian name of the strategy: «Nærmiljøatsningen på Linderud, Sletteløkka og Veitvet».

environment – to make sure that outdoors spaces are safe and pleasant and that important meeting places are easily accessible. To approach these three goals the municipality’s strategy is to collaborate and engage with residents to use their knowledge and planning capacities to co-create the neighbourhood (Oslo municipality, 2017).

### 4.3 Linderud community garden

Linderud community garden is on the property of, and a part, of the museum Linderud Manor. The historical manor and its garden are private family property and were fenced and closed for the public for 300 years until 2007 when it became a part of the Museums in Akershus (MiA) (Museums in Akershus, 2021b). Today the Manor is a museum open at daytime, while parts of the outdoor property is accessible at all hours to pass through. This part of the garden also has a climbing park for children. The community garden makes up approximately  $\frac{1}{4}$  of the outdoor space (see figure 7).

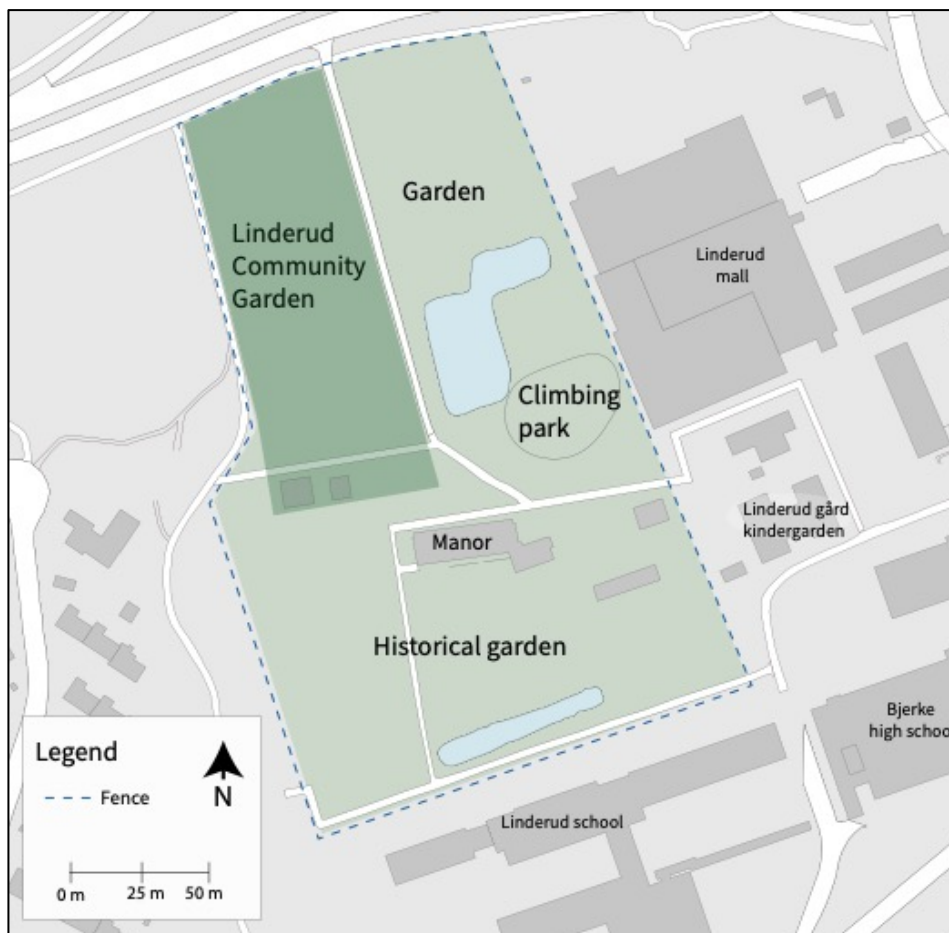


Figure 7: Overview of Linderud Manor. (Authors work. Map source: Geovekst).



*Photo 2: Linderud Manor and the area where Linderud Community Garden lies today was inaccessible for the public until 2007. (Photo: MiA – Museums in Akershus).*

The community garden is a 7000 m<sup>2</sup> large area that was established in 2020 on a vacant plot of the garden that had been left unused since the 1960s (Museums in Akershus, 2021a). Some locals had for several years tried to establish a community supported agriculture (CSA) at the site. Due to lack of economic resources, it was never realized until Oslo municipality, as a part of the European research project Edible City Network (EdiCitNet), wanted to use the same site for urban agriculture and started a collaboration (interview data I1 and I2). Today the space is used for both CSA and for municipal research, where the latter involves an incubator program for entrepreneurs to practice environmental, social, and economic sustainability. MiA and Oslo municipality are also working closely with the administration of Bjerke district and different organizations to reach out to the community. There are three main groups that have plots in the garden: CSA members, entrepreneurs through the incubator program and social organizations and institutions (schools and kindergarten).





Photo 3 and 4: The area where Linderud Community Garden lies today was an unused field until the garden was established in 2020. The photos are respectively from 2018 and 2021. (Source: norgebilder.no)

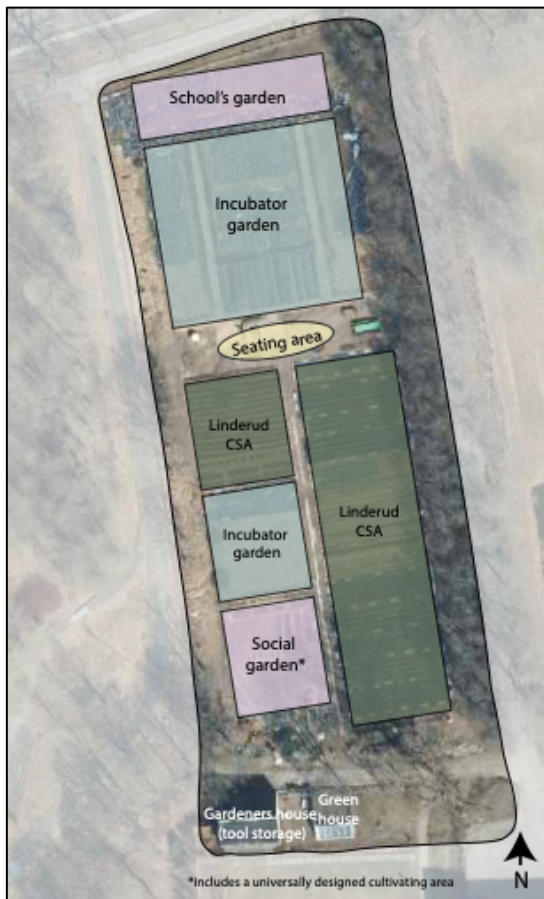


Figure 8: Overview of the plot categories at Linderud Community Garden. Illustration by author based on information e-mail from municipal coordinator for urban agriculture in Oslo, received 07.10.2021.

Linderud community garden has the goal of becoming a green meeting place for the local residents (Museums in Akershus, 2021a). All the incubators are committed to implement a social action that gives something back to the local community (interview data I3).

While there is no official platform for the whole community garden, the CSA, that makes up a greater part of the garden, has their own platform that states that *“the members should reflect the neighbourhood population”*. Linderud Community Garden has also employed local youth for summer jobs to build participatory engagement, where the majority are of non-Norwegian ethnicities (Weger & Reich, 2021).

Table 4: Categorization of member organizations in the garden, based on information on email from coordinator for urban agriculture in the municipality, received 07.10.2021.

Social organizations and institutions	Incubators	Linderud CSA
Natur High School Bydelsmødre Bjerke Linderud gård barnehage	<b>Business entrepreneurs:</b> Markblomst Samlepunkt Onkel Troll Pust Sip Gruten Soppløsninger  <b>Social entrepreneurs:</b> Unikum (job training) Culture Incubator (job training) Jobben Oslo (job training) Bålprat (youth cooking program)	Based on approx. 60 individual members. The CSA operates as one unit.

## 4.4 Empirical findings

In order to test the theoretical framework that makes community gardens third places a place for informal interaction I have used data from spatial mapping, observation, and interviews. The findings will first be presented by macro-design, micro-design, and comfortable design. These findings are then drawn together to explore Linderud Community Garden as a third place.

### 4.4.1 Macro-design

#### Centrality

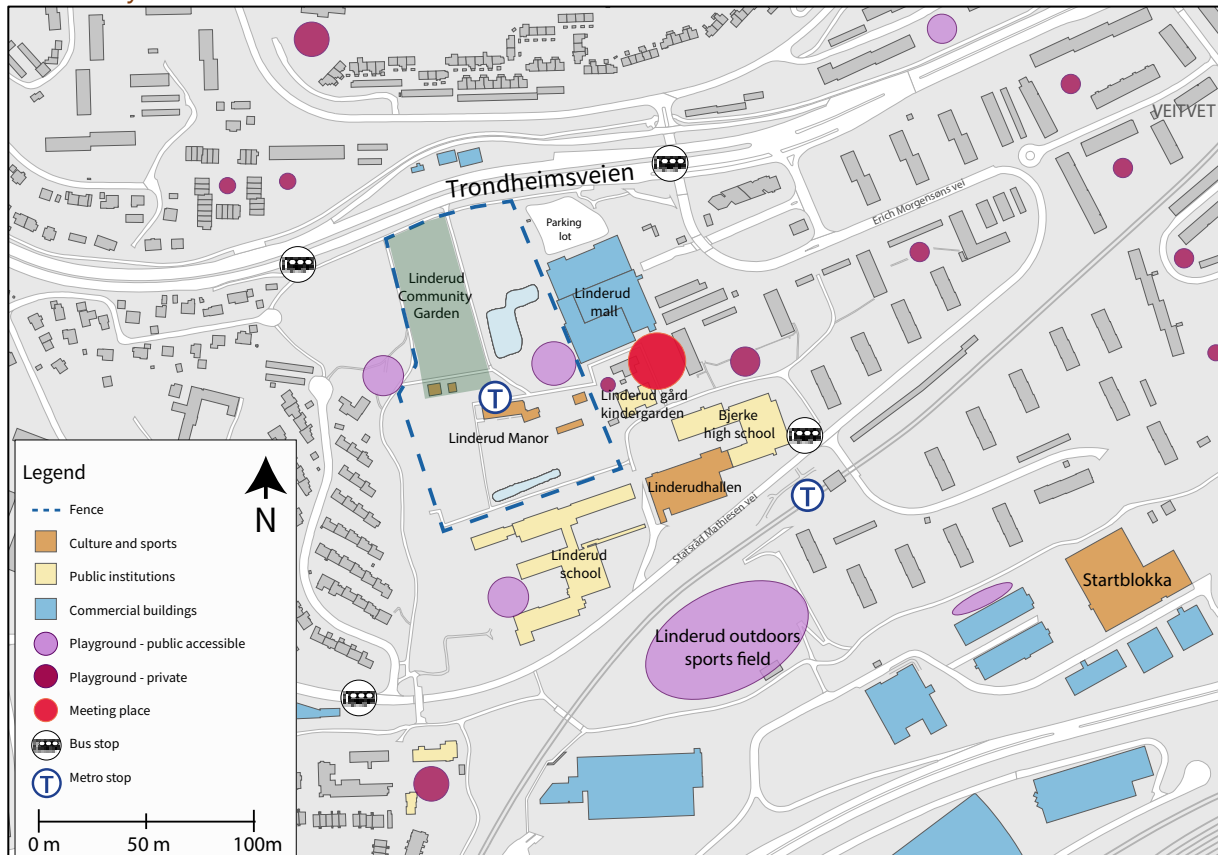


Figure 9: social functions and public transport around Linderud Community Garden. (Authors work.

Map source: Geovekst).

The location of Linderud Community Garden in the center of Linderud borough creates a synergy effect of use and interaction. Being located within 2-5 minute's walk from social functions such as the mall, schools and sports hall, Linderud Community Garden becomes a part of the central social functions. The mall also holds health care services, grocery stores, a public library, and the local municipal office for Linderud borough. The closeness to these functions has elevated the function of the community garden in terms of activity, mobility, and visits.

The mall contributes to kitchen facilities for one of the social organizations for youth. The access to the kitchen allows them to be able to cook meals from the harvest throughout the season and prepare food for public events at the community garden, such as the summer party. This organization also recruits youth through the library, the schools, and channels through the municipality (interview object I3). Startblokka, a building turned into a meeting place where people can create their own workspace, gallery and arrange events and workshops, is also used by members of the garden. One of the CSA members told me she had her gallery there, and that Samlepunkt dries their herbs from the garden there to process for sale.

One member informed me she was going to the shopping mall after a volunteer workshop to do errands before taking the metro. On an observation I disclosed a kindergarten group who passed through the garden to check in on their plot while on excursion. Given the limited distance 3-6 years old can walk, the centrality of the garden is essential for this age group to attend the garden as a passing by on a kindergarten excursion. One of the interview objects experienced that youth who were in summer jobs at the community garden had asked and realized that they could use the space for lunch at other times as well, which can be assumed would be for lunch time during school and relevant due to the garden being nearby the schools. The centrality thus makes the garden accessible by walking, where a visit to the garden can be combined with the use of other functions.

During observation, one of the persons from a social organization for minority women made a video of two others in their plot gardening saying in the recording that there “are plenty of work to do” in a joyous manner. She told me she was sending it to the rest of the organization to let them know they were there. According to her, since it was around 6pm people probably already had dinner and finished other chores and could come by. As they had already been there for two hours and the sun had started to set (the garden then becomes dark, as there is no lighting), I understood that they expect people to get there easily in a relatively short time due to the garden’s centrality.

During two different weekday observations, two episodes support the importance of centrality for people to frequent the garden:



### Episode 1:

One morning when I was walking into the garden I saw a guy(G1) in workwear on my way in. Two hours later the following situation was observed:

“A guy(G1) in work wear is gardening. Another guy(G2) in work wear walks into the garden towards the same plot. On his way he stops for a short talk with a woman who is gardening on her own spot, before he proceeds to join his companion in the plot he was heading to. None of them spoke Norwegian fluently.”

They left after ten minutes, but one of them appeared again after half an hour:

“G1 appears again, now with another person in work wear. On their way to their plot, they pass two disabled youth gardening, and G1 shouts encouraging words to them as they pass.”

Observation notes from Wednesday 15<sup>th</sup> September 2021, around noon

### Episode 2:

“Two women of different ethnicities enter the garden. They walk into the gardener’s house, come out after ten minutes and leave the garden again.

[half hour later]

The two women come back with a third woman. The third woman walks towards a plot, while the two others go into the gardener’s house. They come out with paper cups with coffee to all three of them.”

Observation notes from Thursday 14<sup>th</sup> October 2021, 4:30pm – 5pm

The centrality to other functions seems to make it flexible to attend the garden, due to its’ practicality to be combined with other errands and meet ups with different people. G1 had been back and forth the garden over several hours, doing something else when he was not gardening. The case of the women where, apparently, they came to put on the coffee

machine and went somewhere else until the coffee was brewed illustrates the practicality. They were all of minority background. One of these women was not gardening which she explained to me in an informal conversation was due to her not feeling well. She was always standing by the plot to be social with the two others who were gardening. She also offered me coffee and told me to help myself from the freshly brewed coffee in the gardener's house.

Further synergy effects were evident through the extension of urban gardening to the outdoor meeting place outside Linderud mall and at Linderud school. In collaboration with employees at the community garden, youth from Bjerke high school had planted berry bushes in the schoolyard and plant boxes at the outdoor meeting space outside the mall (observation and interview object I1). The closeness to the garden makes planting in these areas possible as it gives access to gardening tools.



Figure 10: Publicly available green structure. (Authors work. Map source: Geovekst).

There are public green structures of various quality available for residents within 400 m from central Linderud. The main green structures around the dense residential area east of central Linderud are physically active demanding green structures; sports fields and Kolås hill that has steep terrain. Veitvet park, Bjerkedalen and Linderud Manor are the closest structures that are easily accessible for a wider spectrum of groups that do not demand physical

activity. The garden is thus located in an area where there are not any similar public green spaces that offers an activity that does not demand physical endurance yet is activating in contrast to Bjerkedalen and Linderud Manor which are parks.

## Connectivity

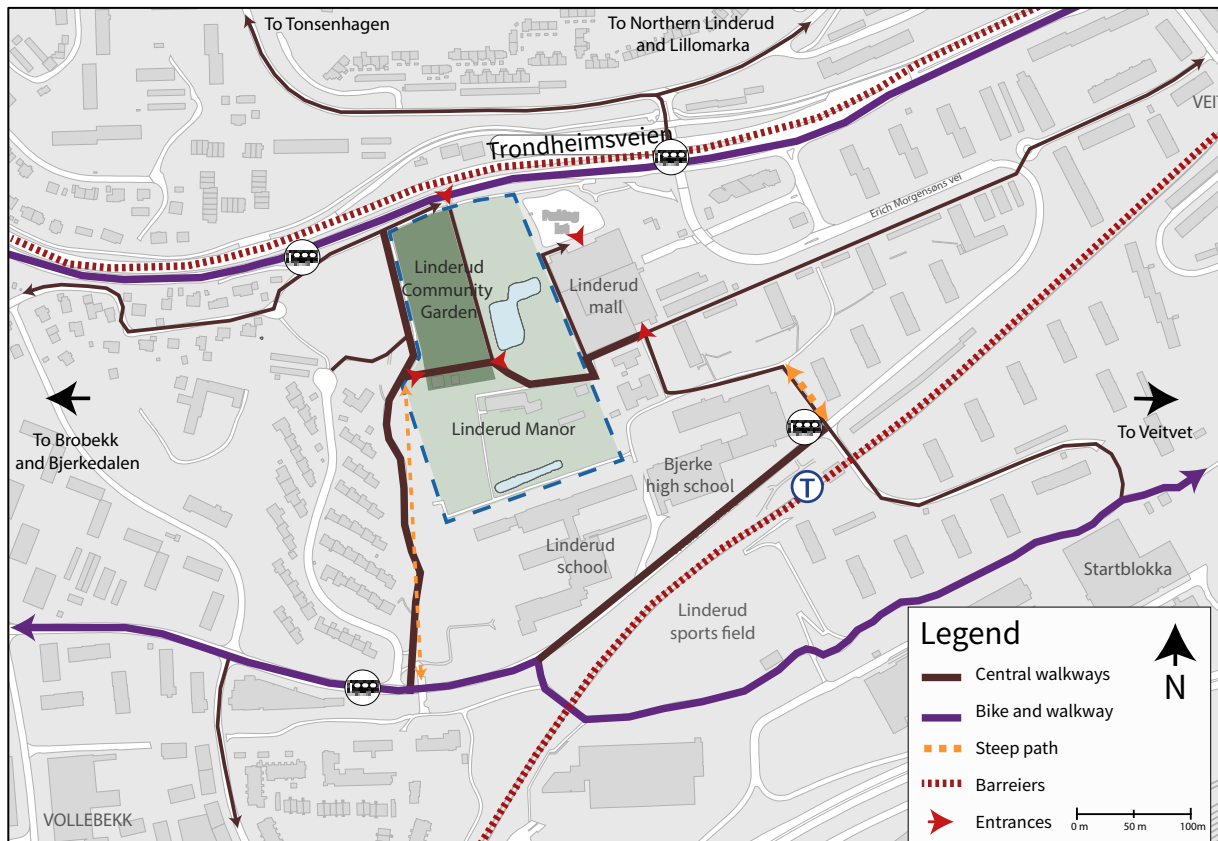


Figure 11: connectivity analysis of Linderud neighbourhood. (Authors work. Map source: Geovekst).

The garden's ease of access with 6 public transport routes that runs throughout the day (Ruter, 2021) makes the garden accessible from the city center of Oslo and neighbouring boroughs. The garden's location makes it easy to walk from east and west of Linderud, where the most densely built high rises are 400 m to the east. The data found through informal talks with members and visitors have found that people frequently bike from the neighbourhood, as well as from Kampen (5,5km southeast) and Kalbakken (2,7 km northwest), demonstrating a well connectedness to the garden.

Trondheimsveien in the north works as a barrier, and most of the inhabitants living north of this trafficked road have expressed that they feel more connected to the neighbouring boroughs due the proximity to stores, school and public transport (Bydel Bjerke, 2020, p. 47). The walking and biking experience to Linderud downtown from the north of Trondheimsveien

is reduced due to few over- and underpasses, which are located far from each other. The metro line can be perceived as a physical barrier but was experienced differently by an informal conversation object; a middle-aged lady who was at the garden for the first time came from Startblokka and contemplated how easy it was for her to find her way to the garden and that *“it only took ten minutes”*. The same path has on the other hand been by elderly expressed as troublesome, where the part from Linderud metro station north towards Linderud mall and the garden to be too steep for elderly and people with physical challenges, as well as people with strollers (ibid, p. 48). Interview object I3 also stated in an interview that there are not many elderly using the garden. On another note, observation has shown that people with wheelchairs, problems with knees and body aches have attended the garden.

### Visual access

The visual accessibility from Trondheimsveien (photo 7) and the pathway along the east side (photo 9) of the garden was confirmed by four informal conversation objects. Two individual persons said that the first time they noticed the garden was by passing by bus on Trondheimsveien. A couple that was visiting the garden for the first time had discovered the garden on an evening bike ride they had had earlier in the summer. Observation also disclosed a family walking on the pathway along the fence in the west where one of the persons was pointing into the garden and examining it together with the others while they were passing.

The visual access from south and west, where most of the social public functions are, is non-existent as it is blocked by Linderud Manor and its historical garden with numerous tall trees.



*Picture 7: Linderud community garden seen from Trondheimsveien where there are high frequency of cars and buses passing. The low fences and visual identity of the garden makes it visible for passers-by. (Source: Google Street View).*



*Picture 8: walking along Trondheimsveien gives instant visual access to the garden on the right. (Photo: author).*



*Photo 9: taking left from the previous picture leads one to a path along the westside of the garden towards Linderud School and the bigger connective street Statråd Mathiesen vei. (Photo: author).*

## Thresholds and gateways

The entrance from the north is visibly marked with pillars on each side and an open gate that is accessible at all times. The sign on the left with an overview of Linderud Manor indicates that it is a publicly accessible area. However, it also lists opening hours of Linderud Manor and its' historical garden to be from 9 am to 5 pm, which can be confusing when the gate is open outside these hours.

The entrance from the east is the one closest to the shopping mall and the metro station. The gateway covered with gravel and surrounded by cars did not appear welcoming, neither was it understandable that the community garden was in there, as it was not visible from this entrance due to the climbing park and trees restricting the visibility. The blue sign was the only indication that it is allowed for the public to enter from here. However, the presence of people in the climbing park functioned as an indicator for public access. This activity was however limited to certain times – sometimes it was full of families, at other times it was empty.

The entrance from the west leads directly into the garden and the shortcut to the public functions in the east. The tracks in the snow (photo 12) indicate that the shortcut through the garden to the east is also being used during winter. The gate does not lock and is usually completely open. This makes it easier to understand that one is allowed to enter, though the view inside can make one unsure of whether the space is public or private.





*Photo 10: Entrance to the property of Linderud Manor from the north, along Trondheimsveien. The garden is on the right side of the entrance. (Photo: author)*



*Photo 11: Entrance to the property of Linderud Manor from the east. The edges of Linderud Manor can be seen on the left side of the picture. (Source: Google Street View).*



*Photo 12: Entrance to the garden from the west leads straight to the shortcut to the east. (Photo: author)*

#### 4.4.2 Micro-design

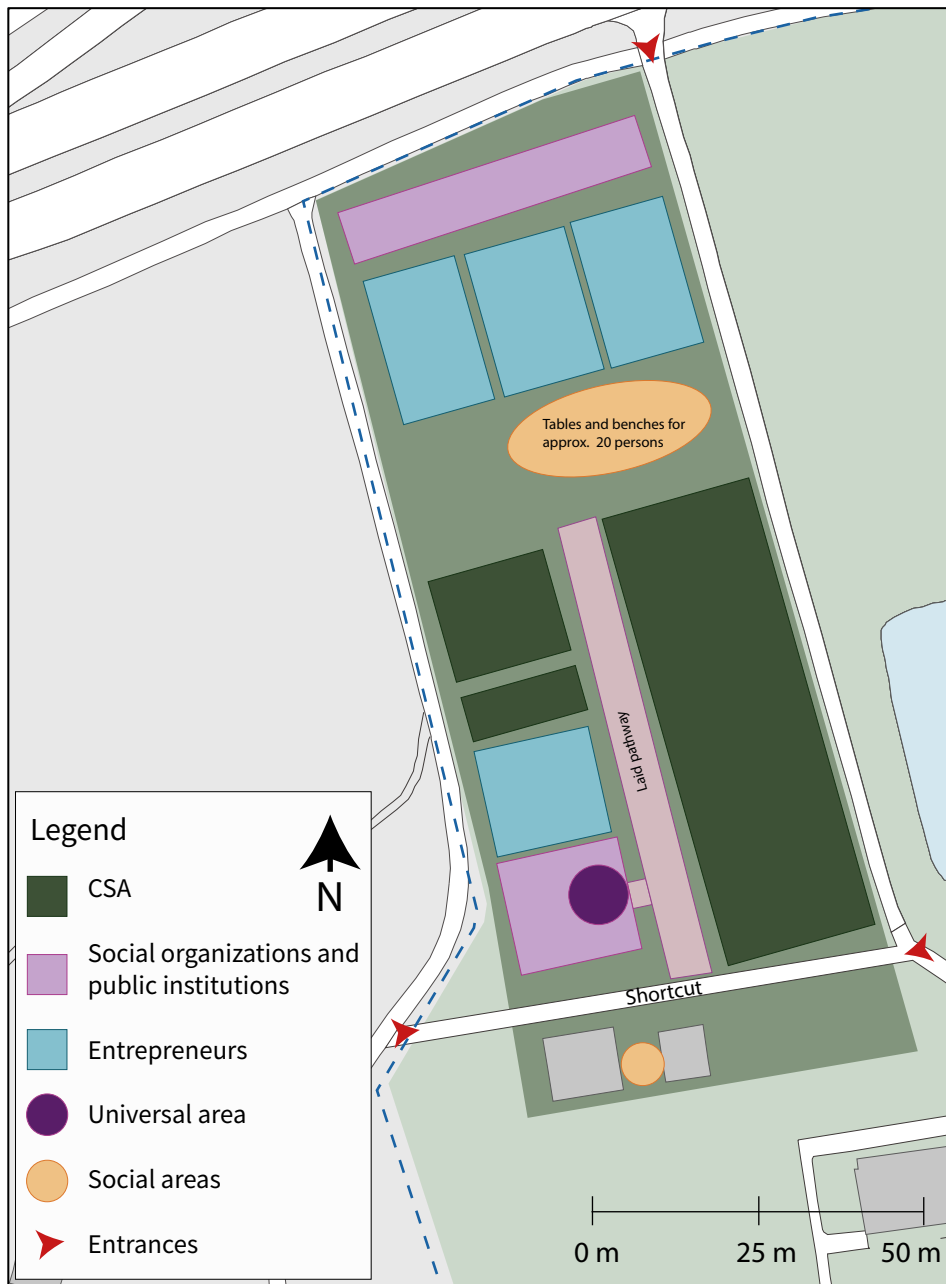


Figure 12: the macro-design of Linderud Community Garden. (Authors work. Map source: Geovekst).

#### Entrances and pathways

The site of Linderud Community Garden is free to enter at all times. Figure 13 shows the three entrances where the flow of people indicates the entrances in the south as the most used ones. The entrance from the north was mostly used for recreation. The people observed here on a normal weekday consisted of people on walks, groups of elderly, wheelchair users and people promenading their dog. This entrance is nevertheless an essential feature for the connectivity of the garden, as it makes access from the north



possible, and facilitates for people to walk through the garden, as it makes it possible to walk from north to south and enter and exit at each end, and thus not feel like they have to actively walk the garden and turn around to exit.

The entrance from the west and the east were the most used to enter and exit the garden and to pass through the shortcut (see figure 13). This entrance was opened after the establishment of the garden and has made a new pathway in the borough, making it easier to get from the residential area on one side to the social functions on the other side. Observation exposed people both on promenades with baby strollers and people who seemed to be going somewhere and used the shortcut for its practicality. Interview object I1 also informed about kids using it to get from the east to the playground west of the garden.

The pathway that makes the shortcut is also an essential path used by gardeners in action, which make gardeners and non-gardeners occur in the same space. During a volunteer workshop, one of the gardeners stopped as someone familiar passed through the shortcut and had a chat. Based on the pathway being publicly accessible and observed as a highly frequented path and a place to meet familiars, the garden facilitates for presence and thus interactions.

The laid pathway in the middle makes out an important axis for interaction. Observation showed that people use the laid pathway in the middle as the most natural route to get into the garden. The pathway is used to get back and forth to the gardener's house and the entrances/exits, even if there are shorter distances in between plots or by walking along the east or west edges. The length of the garden of 160 m makes out a distance that is relatively

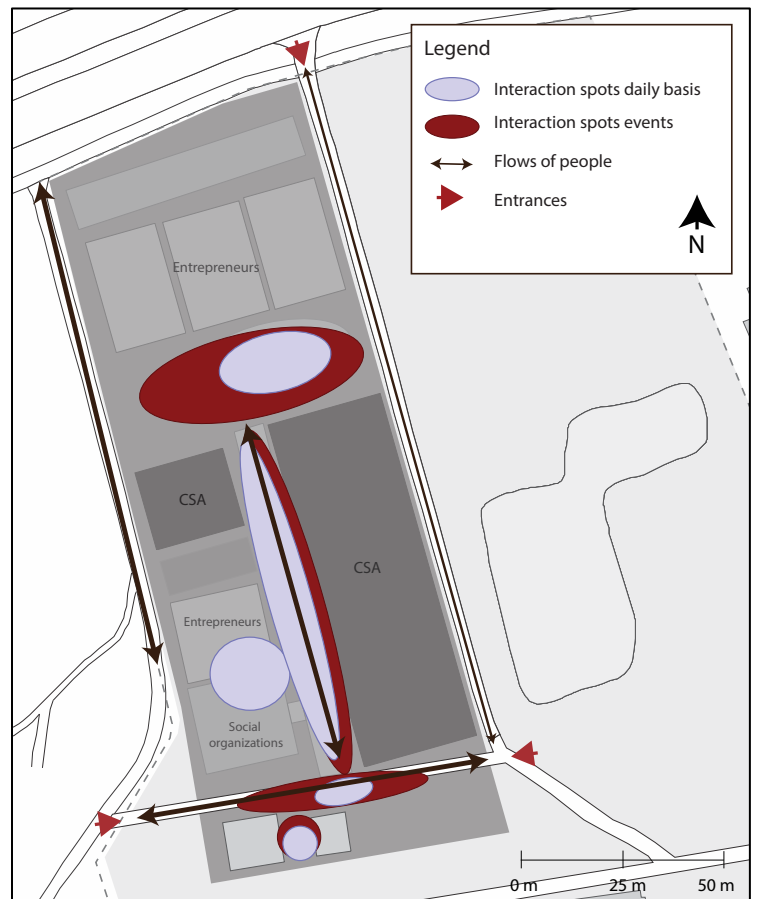


Figure 13: Spots where most of the interactions occur. The flow of people is based on counting done over one hour on a weekday 15th December 2021. The interaction is based on the total observation. (Authors work. Map source: Geovekst).

effortless for people to walk back and forth several times, which increases the chance of interaction. Interactions that have been observed included strangers (one gardening member and two non-members) that started to converse about the garden, a guy promenading his dog using the pathway who started chatting with gardeners and people shouting encouraging words from the pathway to others in the field. Additionally, gardeners occasionally passed each other and stopped to exchange a friendly chat or exchanged gardening tools. Observation data further shows that the laid pathway attains the opportunity for physically disabled persons to participate in gardening; a young wheelchair user of minority background was observed attending the universal area and started gardening with one other youth and two adults. Further observation disclosed two women with a children's carriage promenading through the garden on the laid pathway. Drawing from these observations, the laid pathway gathers a flow of people and makes out an important feature for chance interaction.

### Activity facilitation

In addition to support gardening and mobility, the garden further served as a site for multiple functions. Gardening as the main activity was shown to be encouraging informal knowledge and cultural exchange in-between users and non-users as well, while educational programs fostered interaction through gardening, cooking and carpentry. As a public accessible site, the garden functioned as a recreational space for neighbours to attend and enjoy. The following section will be themed in gardening site, recreational site and educational site.

### Gardening site

Observational and interview data showed the potential of interaction from gardening, ranging from a broad specter of interaction; from chance encounters to building collaborative friendships.

“Everyone at the CSA’s volunteer workshop were encouraged to take a break from gardening and sit down for some food. People gathered around the tables in the social area in the middle of the field. One of the members had baked a cake with zucchini from the garden, while another woman had brought a Bosnian pie. She explained it was a recipe from her home country and elaborated on how her husband had made it. The members around the table did not seem to know each other well from before, but everyone talked loosely together about the garden and the food. Two kids of minority backgrounds were playing in the garden, running back and forth to the table to get food and sometimes to sit with their mother and us.”

Observation notes from Thursday 2<sup>nd</sup> September 2021 5pm - 6pm

The volunteer workshop described was represented by a relatively diverse group: two Norwegians, amongst them one JD (juris doctor), a European author, a Scandinavian agronomist, and a South European family with two children (unknown profession) and me as a student of visible minority. The garden thus functioned as a place where people could express themselves together with people that had common interest in gardening, despite different motivations for being a part of a community garden. The main motivations that were put forward throughout the study period were either interests in growing vegetables and contributing to a sustainable food production system, community and neighbourhood building, gardening and/or health aspects regarding healthy food and mental health. The different motivations thus defined the interaction that occurs. While some people contributed with lunch and coffee to encourage social breaks during gardening work, other people exchanged knowledge. On the question of collaboration in the garden, one interview object explained:

*“You have a lot of different kind of expertise, or not, in gardening, some are very new, for example with Jobben [job training organization]. So there was a lot of this neighbourly help, you know, just kind of on the spot, like “Hey! Can you help me with this?” when you happen to be there at the same time. But then also more planned. I know people talk about selling things together.”*

*Interview with coordinator 13 22<sup>nd</sup> October 2021*

Whilst another interview object on the same question claimed:

*“It’s too little so far. Because the entrepreneurs have their own plot, and everyone has struggled to get started, and then there is the CSA who has their own system and volunteer workshops. We do want more interaction between the different actors, and I hope that the permanent meeting place will contribute to that. It makes it easier to invite to regular gatherings and cooking.”<sup>4</sup>*

*Interview with coordinator 11 26<sup>th</sup> august 2021*

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<sup>4</sup> Translated from norwegian.

While the CSA worked as a big community of individuals sharing one big plot, the entrepreneurs were individuals or small organizations cultivating smaller plots on their own, where there was only one or few individuals doing all the gardening. The latter has led to a collaboration in-between the entrepreneurs and their organizations. On the question of whether there was collaboration between the different actors in the garden, I3 explains; they help each other water each other's plots over the summer. She further elaborates that most of the collaborations start on site. People ask the person on the neighbouring plot for help, or at events, one of the social organizations spontaneously stepped in on the spot at a summer party to arrange and serve beverages when this was forgotten by the party committee. These statements express different levels of collaboration and interactions in the garden, while the chance and personal interactions are present, are the structural collaborations missing. When asked about if there have been any common platforms for people to communicate together I1 respond that there had been two digital meetings (digital due to covid-19 lockdown) and that the incubators had had their own meetings. One can presume the lack of physical and personal meetings can have had effect on the structural collaboration, along with how social distancing restrictions restricted physical gatherings of more than 10 persons meeting to work in the garden together.

The difference in the structure of the CSA and the entrepreneurs also reflects the people involved in them. The CSA, consisting of approximately 60 members are represented by different types of individuals with different motivations and have members from social minority organizations to actively engage people that reflect the neighbourhood demography. While I1 explains the entrepreneurs as:

*“The test plot users(entrepreneurs) are typically a bit resourceful people who have got their own plot. We thought about it as quite a paradox. It is also a bit of a paradox that EdiCitNet are like “how can urban agriculture contribute as an economic resource?” and who can grow on 50 m<sup>2</sup> as an economic resource? It takes a lot of work, and you don't earn much on it.”*

*Interview with coordinator I1 26<sup>th</sup> august 2021*

Despite social interaction and community building within the CSA, as illustrated with the observation of social break with snacks, few of the 8 CSAs members present had relations to the rest of the garden. Within the same break the members discussed and wondered what

their connection to the rest of the garden was and how the community garden was built up, as few knew anything about the garden besides the CSA. While the entrepreneurs through their municipal program had their own community and helped each other out as described by interview object I3, the CSA also worked as its own community. This understanding was supported by interview data where two of the interview objects (I1 and I3) explained a conflict that had occurred in the establishment phase of the garden. There had been disagreement on the use of space between the CSA and the municipal funded research project. The CSA, who had been trying to start a CSA for several years on this plot, wanted space to grow as much vegetables as possible, while the municipality's project wanted to use some of the space for a social meeting place. A temporary meeting space was made with hay balls instead of fixed furniture as a compromise the first year. The meeting place was later seen as a positive use of space by the CSA, and it was decided collectively to make it permanent with proper furniture (interview object I1 and I3). Other conflicts that occurred also lead to collaboration through the process of solving disagreements and finding solutions – on everything from how to share and keep the gardener's house/tool shed and how to distribute soil (interview object I1).

One of the more frequently present minority members of the CSA was observed on several occasions giving away her share of the harvest of kale and Jerusalem artichoke. When she offered me her kale, she told me that she did not need it, as she did not know how to use it. She did not understand why the CSA grew so much of it. She believed it was probably because Norwegians love it, but also stated that it was weird when many members were not Norwegians. They wanted more chili! Which she would let the head gardener know when all the members were going to be asked what type of vegetables they wanted for the next year. This illustration shows the need to understand the context of the neighbourhood and members to enhance the use of the garden as a place where people feel they have a purpose to be a part of. Notably, she also explained to me that one of the garden's social plots for organizations was distributed to one of the minority organizations so they could experiment with growing vegetables from different countries.

One couple of South Asian origin visited the garden for the first time and told me their intention to get inspiration for their own allotment garden that they had established in their housing association. Interview object I3 also experienced the interest in growing vegetables mainly from visible minorities, by women between 30 and 50 of age: *“What I get asked probably the most about, yeah, wanting to grow something for themselves. (...) I would say*

*more visible minorities are asking about growing themselves, definitely.*” while Norwegians mostly are curious, asking questions like “*Oh, what are you doing here?*”. The garden for cultivating can thus be understood as a site that attracts people from the outside to visit due to the possibility of growing vegetables or out of curiosity.

### Educational site

*«You’re a brother. We are family when we sit around the table and eat the same food. You don’t have to do anything else. It is magical.»*

*Interview object I2 on youth making food together, 15<sup>th</sup> October 2021*

In addition to the informal education that happened when knowledge was exchanged through everyday gardening, the garden also facilitated organized educational activity. These were in the form of school classes and kindergartens, social programs, job training, language training and summer jobs for youth in collaboration with the district administration. Interview object I2, a coordinator for one of the youth organizations, explained the following about the programme:

*“To prepare food together is just an excuse to do something subconscious. (...) It is to cook, but in an intuitive way, they see that “we are here together”. We are doing something together. We are going to serve those who work here (at the garden). So it’s not just our working group, but the whole team (of youth who are organizing the food). So, they watch out for each other. Those in the kitchen have to prepare the food, and others serve it in the garden. And the people in the garden get so happy because it’s hard to be in the field. Then we circulate on the tasks. Because working with compost might be a bit boring. So, it is a tool. So, there is joy. And our first ingredient is love.”*

*Interview object I2 15<sup>th</sup> October 2021*

I2 further states that the food is as a tool – whereas it is the social that is the goal. The same organization also used the garden to have talks around a bonfire with the youth. The informant further informed that the youth talk and learn about each other’s culture, and how they help each other out with language barriers.

*“Sometimes I speak with a girl in Spanish, or in English or in Norwegian, and others speak Arabic. We are open minded in what language we speak. But everyone explains and helps each other.”*

*Interview object I2 15<sup>th</sup> October 2021*

I1 and I2 both expressed the need for a common kitchen. I1 explained the challenge to get permission to build a kitchen due to the garden being on a cultural property that is under strict regulation. Whereas I2 urged for a common kitchen since bureaucracy was restricting the use of the indoor kitchen at the mall that they had been using so far, where the access was limited to certain hours. The limited access to a kitchen had restricted the program to expand for more courses and participants, despite that there have been youth approaching them asking to join the program. The program has been suggested by the district administration to work with the school and is now in a process of developing a plan together for alternative education.

Concluding from this, the garden as an educational space works as an entry point for collaboration and meaningful interaction by facilitating for learning cultivation, harvest to be processed together and a social space with bonfire. Access to kitchen facilities is essential to get the most effects of the garden and to achieve extended interaction. However, though there are many educational programs, of which several are in collaboration with formal institutions, there is limited access to the resources needed.

*Table 5: Observed users of the space and their activity shared between members, non-members and visible minorities. The table shows a high share of visible minorities using the garden.*

Activity:	Total users	Members	Non-members*	% non-members	Visible minorities	% visible minorities
Gardening	38	38	-		18	47 %
Picnic/hangout	34	23	11	29%	27	79 %
Promenade	11	-	11	100%	7	64 %

N= 74

\*Based on their presence as non-gardening in situ.

*The information is based on 4 observations on regular days (not including events). The numbers count individual users for each observation, where some persons are represented more than once due to their attendance several days. The total numbers make greater than N as people are counted once for each activity, e.g. both counted in gardening and picnic, if they did both during the same observation.*

## Recreational site

### Everyday recreation

“Three girls around 13-14 years old are playing with the water sprinkler in the garden. The sun is setting and casts a soft, orange light over the garden. The girls are dressed in urban clothes and seem to have just passed by and stopped as they discovered the water sprinkler being on. They spend half an hour in the field running through the rays of water, laughing, and taking photos of each other in the sunset”.

Observation notes from Thursday 2<sup>nd</sup> September 2021 5:30pm

The different educational programs and events, such as the summer party, have introduced the garden to youth and neighbours as a publicly accessible place. I3 explains how some of the youth from the summer job programs had asked *“Oh, are we allowed to eat lunch here, are we allowed to go sit here?”* and had seen youth that she knew from the programs wandering in the garden with friends showing them around and sitting in the back of the gardener’s house to eat their lunch. Other programs have encouraged use and visit outside of scheduled gardening. I1 informed how the specialised class (a class with adapted tutoring) who had their own plot, had come by on their own initiative, whereas they usually had scheduled beforehand. The kindergarten I observed and explained in the macro-design section further supports the understanding of the space used as a recreational site extended from the educational use.

Observation and informal talks have shown other recreational uses: one woman from South Asia told me she just moved to the area one month ago and that she had never been to the garden before, only at Linderud Manor. Her purpose in the garden was to meet a person from the Salvation Army which she had agreed to buy firewood from. Another girl who did not have any connection to the garden was there to meet up with her friend, an entrepreneur gardener, and spent an hour there before they headed somewhere else. The gardener was wearing a casual dress, like she came directly from ,or was going, somewhere else, and was not dressed for heavy garden work. Nonetheless, they both worked in the garden for an hour, before leaving together.



“Two minority women were sitting outside the gardener’s house eating nuts, hanging out in a casual, friendly manner. I overheard them advising each other on filling out forms they have to send to a municipal department. They were later asked by one of the CSA members to join the snack break in the social area. They responded gratefully that they were heading home for dinner and then walked away separating ways.”

Observation notes from 2<sup>nd</sup> September 2021 3pm – 4pm

These women were members of the garden and knew each other from before. The garden seemed to be a place where they could meet to be social together, before heading toward each of their respective homes. Observation further discovered a minority family of non-members having picnic in the social area in the middle of the garden. Promenades are another form of activity that is present, and is performed by both women and men, of visible minority as well as Norwegians, mainly people around 30 – 50 years old. Some walk through the garden in peacefulness on recreational walks with a friend, a group, or in solitude while others walk their dogs. On the question of the presence of elderly in the garden, informant I3 responds:

*“There haven’t been a lot of elderly people. (...) We have worked with the age range of the project (Edible City Network) which is like 25-50 or so. Elderly is definitely a group that is less represented.”*

*Interview with coordinator I3 22<sup>nd</sup> October 2021*

Two of the interview objects informed about youth hanging out during the evening smoking drugs in the garden, some of which were youth they knew from different programs in the garden. One of them also informs, irrespective of the youth, about the occurrence of drug transactions in the garden.

Based on this data, the garden functions as a casual place to meet up, where many non-members feel welcome to enter and use, both invited and on their own initiative. However, the fact that some youth, even with connection to the garden through their summer jobs, feel insecure shows that there is uncertainty around the publicness of the garden. The lack of elderly present shows that there is a correlation between the use of the space and the social configuration – that there has not been a focus on elderly is also visible in the use of the

space, including for non-members. Non-members who use the garden include a broad range of minorities. It is apparent that the garden encourages everyday use, increasing the chances of interaction, both the types of interaction the space is intended for but also unintended ones, such as drug use.

### Organized events

“Two girls are having their faces painted, kids are tripping on their feet in line waiting for popcorn, while others are spinning for their lives on a smoothie blender bicycle or jumping across the field in potato sacks trying to reach the finish line. Parents are scattered all over the social area, some standing in the continuous line for food from the BBQ-tent served by summer job youth, others chatting with other families. There must be around 80 people present here, and there seem to have been a continuous flow of people coming and going. The majority are visible minorities of different parts of the world: South America, South Asia, the African continent, the Middle East and South Europe.”

Observation notes from open summer party 15<sup>th</sup> august 2021

Throughout the growing season, the site had been used for public events, such as the summer party and gardening events where everyone in the neighbourhood were encouraged to join regardless of membership. The two public events that were attended for observation offered both food and had DJs playing music in the garden, both hosted by youth through the educational programs. While the gardening event drew approximately 20 persons, the summer party event drew approximately 80 persons at peak time, while there were probably more people coming by before and after. This can be understood due to the different activities offered. While both events were attended by children, parents with baby strollers, youth and adults of minorities, the summer party attracted significantly more people as it offered activities that did not require gardening, as described in the observation passage. Based on these situations, the garden site had a function as a venue for bigger, organized gatherings for the public, where activities did not necessarily have to do with gardening – and in this way attracted different types of groups aside from people with an interest in gardening. The presence of people fostered chance encounters of strangers through the activities and games, mainly between children, and increased the probability of encounters of adults by them lingering in the social area together. The organizing of events had demanded

collaboration between different groups that had connection to the garden: coordinators, summer job youth, and members.

The site has also been proven to function as a semi-private space that fosters a different type of interaction, where many people meet over a common ground. This is illustrated by the thanksgiving event arranged by the CSA for their members that found place in the garden's social area during daytime. The social area with seating for approximately 20 people was expanded with numerous mobile benches and logs around the bonfire to host all the attended members. The members each brought a dish, and people eagerly commented on each other's creations during the meal. Several dishes reflected the members cultural background such as a Spanish paella and a Bosnian pie. Many people had not met each other before, due to a year affected by covid-19 as volunteer workshops had been conducted in small and distanced groups. The observation further showed strangers of different minority backgrounds having long conversations together where cultivation, use of different types of vegetables from the garden, the thanksgiving meal or Linderud borough often were the starting points.

*"Is it possible to use the seed from this years' pumpkins to cultivate next year?"  
(European girl)*

*"They are talking about building new apartment complexes in front of the mall. I hope they don't do it. The neighbourhood is dense enough already." (South European woman)*

*"Last year I fermented the cabbage. I can give you the recipe." (European man)*

At two observed situations the recognition of each other from previous volunteer workshops was what sparked the chat. The conversations built on information from their previous interaction *"You're the one who lives over there, right?"*. When we were a group sitting around the bonfire, a lady in her late 50s greeted a white girl speaking broken Norwegian, a Norwegian woman and me: *"I haven't seen you around here before. Are you new?"* which lead to stories of how each of us became a part of the garden.

Before the social thanksgiving event, people had been encouraged to come early to do some gardening work. During this time, the following situation was observed:

“Three adults with a baby stroller enter the garden. They greet one of the gardeners of the CSA who they seem to know as they catch up on each other’s daily life standing in front of the gardener’s house while people were passing to get tools and do tasks in the same area. Another woman who knows them joins the conversation. They all speak Norwegian fluently and their appearances indicate they are Norwegians. They chat together for quite long.”

Observation notes from the CSAs thanksgiving party 16<sup>th</sup> October 2021

“Four women are standing in a group together. They are all different minorities and are connected through one of the organizations. They know many of the people, and different people approach them for a chat during the event. I recognize one of them saying previously that she had a bad knee and couldn’t garden but will come for the party. One of them shouts my name while I am at the other side of the social area “Christina! Nice apple pie!”.”

Observation notes from the CSAs thanksgiving party 16<sup>th</sup> October 2021

These observations demonstrate different levels of interactions, from chance encounters to friendly catching up. Being a member of the CSA and sharing dishes created a common ground that shaped interactions of longer conversations. The make-shift seating with free standing benches and a bonfire promoted a flexibility to walk around and to sit down with different people, activating a continuous change of seats that encouraged people to talk to numerous persons – either forcing people to move to another seat and make new acquaintances, or to be able to catch up with people they have met before and even are regular friends with.

#### 4.4.3 Comfortable design

##### Human scale

Three of the sides of the garden are surrounded by the manors garden or woods, while the north side is a contrast with a highly trafficked road. Considering the area being a suburb of Oslo with high density buildings, the localization of the garden is in calm surroundings with the manors garden and woods blending in with the flat garden landscape. The trafficked road makes out one of the short ends and is somewhat separated by a pathway between the garden and the road. There are no buildings adjacent to the garden except from the old two-

story manor, so the garden is not perceived as enclosed within a densely built city out of human scale. The trafficked Trondheimsveien generates a continuous sound from cars, buses and trucks that lingers in the background

The size of the garden is 160 m x 60 m. Walking from one end to the other is therefore not too far, making it relatively effortless for people to walk back and forth to the gardener's house, and many do not even have to walk from one end to the other, as most of the fields are along the way. The seating area consists of several small tables, which makes it natural for a smaller group to use one table, as well as allowing for a bigger group to take up multiple tables.

### Visual identity

The organized rows of cultivated plants, green house in the middle of the field, wheelbarrows along the fences and homemade scarecrows creates a visual identity distinct from the rest of the neighbourhood. It is thus easy to recognize and remember the place.



*Photo 12: Piles of compost along the shortcut, by entrance west. (Photo: author).*

The garden's unpolished visual identity creates a low profile where people attend regardless of clothing.

People have been observed in nice dresses, urban casual clothes, hoodies and in carpenters workwear. The laid pathway accommodates for a broader group of people than gardeners in practical clothing; people come with baby strollers and wheelchairs, creating an inclusive space for more than gardeners. Compared to a well-groomed garden for aesthetics purpose, the garden has a low profile reflecting a collaboration of multiple groups in the garden.

### Presence of people

At all times during observation done at daytime, evenings, events and over three months there were people in the garden besides me. There was a notable change in the present from July to October, which can be understood from the temperature changes and less people being outdoors in general.

From an informal conversation with a regular it became that the presence of people had significantly changed from the last year to this one. I was informed that the garden last year often was full of people, while there were not as many now. According to her, the covid-19 pandemic has led to fewer people attending the garden, and people attend at different times. She also underlined that there was so much to do last year, since they were building up the garden from the scratch, while there are fewer big tasks this year. Understanding from this, responsibilities was an important element to attract people to the garden. Also, less presence due to covid might have led to less ownership.

To understand how the site is used, it is important to understand who the people gardening are. Table 6 illustrates the share of minorities amongst the formal member organizations of the garden. Looking isolated at the organizations, 35% have a high degree (see note in table 6) of representation or inclusion of minorities. It is however necessary to look outside the formal organizations, as there are more users tied to the organization of the garden. The youth observed in summer jobs were all minorities. All the entrepreneurs had an agreement with the municipal program to give back to the local community or marginalized groups in their own ways. Where some of the organizations contributed as mentors for the youth in summer jobs, one invited kids to plant their own part of her plot and to make a scarecrow, while another had language practice through gardening (interview object I1, I2 and I3). Some of the organizations were more directed toward unemployed groups and other marginalized groups, regardless of neighbourhood. The entrepreneurs engaged different amounts of people, and how many and who they engaged is dynamic, and it is thus not appropriate to count as a part of a structural understanding of the share of diversity in the garden. The same can be understood for Bjerke high school – the participants vary with the classes each year. Nonetheless, the minorities involved from the entrepreneurs and Bjerke high school make out a part of the users.

Table 6: The table shows the inclusion and representation of minorities amongst the member organizations and institutions in the garden. Information based on observations and interviews.

	Member organization of Linderud Community Garden	Percentage of total (17 groups)
Primary or high degree of representation or inclusion of minorities.	Culture Incubator Bydelsmødre Bjerke Bålprat Pust Linderud gård kindergarten* Linderud CSA**	35%
Primary members not of minority. Contributes to the local community or marginalized groups in different ways, as part of an agreement with the municipality.	Markblomst Samlepunkt Onkel Troll Sip Gruten Soppløsninger Unikum Jobben Natur High School (private school)	59%
Public institutions	Bjerke High School	6%
<p>*Linderud gård kindergarten is not especially for minorities but is included in this category due to the great majority of the children there are of minority (based on observation, 100% minorities).</p> <p>**The CSA is included in this category as it aims to reflect the population of the neighbourhood</p>		

#### 4.4.4 Linderud Community Garden as a third place?

Analyzing Linderud Community Garden as a third place will give the understanding of why and whom the garden is visited by. Does it function as an inclusive third place, according to Oldenburg's (1989) criteria? The macro-design, micro-design and comfortable design meet the criteria in different ways. Nevertheless, will it be appropriate to analyze them as one due the intersections they pose across the designs (see table 1). The presented findings from the previous sections will thus be used in this analysis of Linderud Community Garden as a third place.

Table 7: How physical configuration and social organization of Linderud Community Garden fulfill the criteria for third place.

Neutral ground	The site is accessible 24/7 and members and non-members can come and go as they want at any hour. No one expects anyone to be there, as all the organizations and individual members are there voluntarily (except employees and those obliged through school classes). The garden functions as a place where neighbours can meet outside their home; to garden, to picnic, to play or to have a coffee.
Inclusive	The garden is accessible for everyone, while gardening and harvesting requires membership. The garden however offers spatial (and social) qualities that can be enjoyed by everyone without charge and regardless of status – such as a space for picnic, promenade, or play. The perception of whether the place can be used for recreation, and by whom, is however not clear, as illustrated by the youth’s uncertainty.
Conversation	The site encourages conversation about gardening, food and culture amongst members as well as non-members. It is a place where gardeners catch up with each other, no matter if they met once or are familiar friends. Conversation is also encouraged by the need for collaboration. Conversation is however dependent on the situation. Observation has shown both how gardening on different plots with distance limits conversations, while gardening close to each other in speaking distance encourages conversation.
Accessible	There is a high degree of accessibility due to the public openness, universal design, and entrance design. The garden is well connected to the movement path and has a beneficial location adjacent to social functions. The visible access is however limited from the social functions’ directions, and steep terrain is a barrier for elderly and physically disabled.
Accommodating	The accessibility enhances the site’s accommodation, where people can come and go as they want. People have been observed both gardening and lingering at daytime as well as evenings. Some frequent the garden often to be social – several of the casual social situations observed have been of the same persons. While other are less frequent, for example over the summer and need help from others to water their plots. Gardening as an activity is thus relatively accommodating and flexible but requires some commitments. These are however solvable with collaboration.
Regulars	The member system makes sure that there are regulars that uses the garden. Entrepreneurs come frequently to tend their plot and CSA members to harvest and garden.



	Gardeners who frequent often are comfortable and invite to conversation, offer coffee, bring snacks for volunteer workshops, and contribute to events, such as the spontaneously drink station that was put together.
Low profile	The garden looks according to seasonal activity. There are piles of compost lying around and homemade scarecrows expressing a low profile that does not have the intention to impress. People do not have to dress nicely to come, reducing the pressure and expression of status, making everyone equal, as illustrated with the woman in a nice dress and the man in workwear talking together while gardening next to each other.
Playful mood	Almost everyone is there voluntarily based on their own interest in some aspect of gardening, except from educational programs and the three regular employees. The mood is thus encouraging. People bring their kids to the garden to run around and play while they garden, strangers have snack breaks together and events are arranged.
Home away from home	People control their own presence and feel ownership – they choose themselves to attend the garden and how they use it, whether for gardening or other types of recreation. People do not feel obligation to garden – some come merely just to be social with other members or non-members.

From this understanding of the fulfillment of the criteria, Linderud Community Garden, functions as a third place for many. There are however some limitations, and whether the garden can be perceived as a place that supports inclusive interaction will be discussed in the following chapter.

# 5 DISCUSSION

The following section addresses the main research question: *How can a community garden support social interaction in a diverse neighbourhood?* To answer this, I will first address the three sub-research questions to give contextual illustrations from Linderud Community Garden. The first question elaborates on the *users* of the garden, the second discusses the *physical configuration* of the garden and the third the *social organization* of the garden. I will then conclude on the main research question.

It needs to be pointed out that understanding human behaviour is a complex task and never covered by just one explanation. The actions connected to a garden are dynamic according to season and external influence, such as economic resources, demography changes, city development etc. It is therefore impossible to end up with a definite conclusion based on the findings. Nonetheless, they still draw some common lines with evidently viable correlations.

### 5.1. Who are the people that interact at Linderud community garden?

The users appear to consist of a high share of people from Linderud borough, connected to the garden through organizations, institutions, or programs. Public users who have been observed are also mainly people from the neighbourhood, while there were also people from the adjacent boroughs and districts that came by. The entrepreneurs have become a part of the garden because of their projects, and did not initially have connection to the district. They have, however, become well embedded in the garden community. Some of them have contributed to the neighbourhood community with workshops for local residents or are connected to the district in other ways, such as through the use of Startblokka as a location for side activities.

The gardeners and the public's co-presence have been shown to engage interactions between the neighbourhood's residents, with input of visitors from other part of the city. These interactions mainly consisted of fleeting encounters where gardening as a topic served as the starting point. The more meaningful encounters occurred between members of the garden – where the entrepreneurs were connected through their common municipal project, and the CSA connected within their own organization. The CSA was however represented by many different individuals with different motivations. It also had a social organization as a member, which has facilitated interaction between their members and the individual CSA members. Educational programs have fostered interaction between youth and adult mentors, where several of them were the entrepreneur gardeners.

35 % of the formal organizations in the garden had a minority focus (see table 8). There were additionally minority users connected through the summer job programs and the entrepreneurs' social contribution. The summer job programs lasted for a limited time, while the people engaged with the entrepreneurs were of various numbers and diversity and did not make a high percentage increase. Looking at visible minorities observed gives another picture where there was a significantly higher share of visible minority users for both gardening and recreation.

*Table 8: minorities represented in the use of the garden.*

Organizations with minority inclusion	Visible minorities observed
35%	47% (gardening) 79% (picnic/hangout) 64% (promenade)

Some of these were regulars and thus inflate the number but are nonetheless important. The same regulars represented one of the minority organizations and were usually seen there together – indicating that the presence of each other encouraged them to be there. They were also a group that encouraged others to come by sending videos to their fellows through their channel and created a comfortable atmosphere by making coffee that they shared with others. Murphy (2021, p.62) argues that it is the presence of people, and who they represent, that promotes ownership and comfort. This also implies that the lack of presence and representation results in lack of ownership, and uncertainty around the use of the space. Youth who mainly used the space for educational programs were not represented using the space for everyday recreation and experienced uncertainty about their presence being welcome. However, the inclusion of the youth through the educational programs gave them the opportunity to create ownership to the space and consequently led to the use of the garden for recreation. Elderly have not been encouraged to use the space in the same way, and neither have they been observed using the space on their own initiative. Considering that many elderly live close by in the high rises east of the garden and social functions, the representation was remarkably low. The lack of representation of the groups that the individuals identify with appears to reduce the chance of those individuals using a space. This is critical as elderly immigrants are a growing group and will increase further over the coming years.

The high percentage of visible minorities present in the garden for recreation shows that there has been a need for this type of green outdoor meeting space. Gardening as an activity has also been shown to be an interest mainly for visible minorities rather than Norwegians. Understanding that these are the ones who usually live in the most crowded dwellings, the combination of an outdoor space with gardening activity seems to be desired.

### *Summary*

The analysis supports the reviewed theory which asserts how multifunctional gardens attract a diversity of user groups in terms of minorities, age and gender (Shinew et al., 2004, Kurtz, 2001, p. 664). Linderud Community Garden has a diversity in its user groups, and these intersect in age, gender, and ethnicity as well as different user roles such as gardening, recreational, educational, and practical (mobility). Interaction was fostered by the presence of diverse user groups, and increased the chance of fleeting and meaningful encounters. Interaction between members and the public were mainly short and revolved around gardening, while the more meaningful encounters occurred amongst members.

## 5.2. How does the physical configuration of Linderud Community Garden support social interaction?

### *The importance of location for accessibility and functions*

Varna and Tiesdell (2010, p. 583) emphasize that the design plays a less important role, if a place is not located in an area that people have the mobility to approach it. Linderud Community Garden's location is well within the movement pattern of public transport and dense housing areas, connected with pathways and bike lanes. The effect of a central location is argued by Jacobs (1961, p. 34-40) as important as interconnectedness of public spaces and functions increases the frequency of visits and potential for interaction. The proximity to the mall, schools and other public social functions seems to generate a flexibility for youth and adults to come and go easily and adapt visits to the garden combined with other missions. The location is thus placed strategically amongst social functions that realizes the potential for diverse groups coming together across time and space (Varna & Tiesdell, 2010, p. 584). Children, youth and adults have access regardless of background and resources (e.g. access to car and time to travel). As several of the interview objects indicated, access to a kitchen has been essential to encourage so many youth to be a part of the garden. The location next to the mall and its kitchen facilities has been shown to be crucial to optimize the synergy effects of a community garden and has fostered meaningful interaction between youth and mentors of different ethnicities, as well as in-between youth of

different ethnicities. The fleeting encounters that the garden supported were then elevated to meaningful interaction through the access to a kitchen. Further interaction that has extended beyond the garden itself is illustrated by how gardening as an activity and knowledge generated in the garden has been transferred to other places, such as the cultivation in the school yard of Bjerke High School, outside the mall, and by the use of Startblokka for processing harvest.

Though the garden is centrally located in Linderud, the topography seemed to challenge the approach from the south for elderly and physically disabled persons, while Trondheimsveien functions as a barrier in the north. Even so, the lack of elderly cannot alone be explained by the challenging topography alone, as the data disclosed people attending the garden despite temporary or permanent physical disabilities, for the purpose of being social. Furthermore, there are many elderly who live in the high rises in the west who do not need to face the steep topography. The lack of visual access and that they are not targeted can be alternative reasons for the lack of their presence. The lack of elderly and the fact that physically disabled persons attend the garden solely for socializing shows the impact of the social organization (see also section 5.3).

The lack of visual access from the social functions in the south and east reduces the potential of stumbling across the garden, but also shields the garden from urban activity and creates a more peaceful atmosphere. However, material facilitation beyond the garden's fences indicates its existence. Plant boxes in the meeting spot outside the mall and berry bushes at Linderud School, markings on the ground and signs shows the direction to Linderud Manor<sup>5</sup>. The visual access is of further importance as it expresses the vitality of the garden and welcomes people to access, especially during events. The visual access promotes the event, showing the diversity of users and the publicness, inviting people to come in and join the activities. It makes the low profile on neutral ground accessible, welcoming people to join the playful mood and conversation (Oldenburg, 1989), which in turn contributes to a person's ownership of the place. The visual access is especially important for people who have not used the garden before to discover it.

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<sup>5</sup> Linderud Manor's Norwegian name translates to «Linderud farm», which indicates the presence of the community garden.

### Wider reach with a multifunctional space

The physical configuration of the site offers multiple uses of the garden. The function as a public space seems to be one of the most important features to reach out to the diverse groups in the neighbourhood. The site however works as both a public and a semi-private space, where the public use can be interpreted in two ways: 1) as a place where everyone has the right to access at any time and 2) as a site for public activity e.g., summer party. The semi-private aspect was experienced through as the members' right to use the space as they want, e.g., the thanksgiving party. The members felt the ownership to use the space for their own cause, while the public still had access, creating a co-use of the space. This regards specific events, but also across time where members and public use the garden alongside each other. The different uses foster different types of interaction (see table 9).

*Table 9: The interactions that occurs depend on the use of the space. Events with activities refers to the summer party with games or gardening activity.*

	Normal days	Events with activities
Between members and public	Fleeting encounters	Fleeting encounters
In-between members	Fleeting and meaningful encounters	Fleeting and meaningful encounters

The site facilitates fleeting encounters between the public and members, while only the meaningful encounters occur between members. Fincher et al. (2014 p. 23) argue that intercultural contact needs to be under certain preconditions, where a common project is one of them. This can be understood as the case in Linderud Community Garden, where collaboration on events and on the gardening activities functioned as a common project. However, interactions are not merely fleeting or deeply meaningful – they can be situated somewhere in-between. The functions as a site for public events as well as an outdoor space creates the opportunities for neighbours who have meaningful relationships from before to meet and interact.

Adams and Tiesdell (2012) argues for the importance of activity to make people comfortable and feel ownership to have a reason to go to a public place. By offering several activities, both active (gardening, education, events) and semi-passive (lingering, promenading) the garden seemed to attract a bigger crowd. Gardening as the main activity secured continuity and a presence of regulars that contributed to vitality (Oldenburg, 1989, p. 33). More importantly in a diverse neighbourhood, the garden site had a function as a place where people can embed their culture through gardening vegetables from their background

(Agustina & Beilin, 2017). It further contributes as a part of a public accessible green structure that has enhanced the neighbourhood aesthetic going from an unused area to an aesthetical garden (Lovell, 2010, p. 2503). The mapping done in the planning of the neighbourhood development strategy for Linderud, Sletteløkka and Veitvet stated a lack of meeting places, and an understanding that there is a general absence of public places for minority women to meet in Oslo (Ruud & Søholt, 2006). Combining green space with a social meeting place as a part of the green urban structure has attracted a new user group to interact outdoors on neutral ground where there are no hosts (Oldenburg, 1989, p. 22-23). It appears to have been especially important as a semi-active supplement to the previously green structures that mainly offered passive parks or physical enduring activities. Gardening is however still a physical activity, but universal and functional design lowers the threshold of using the garden. Additionally, the combination with a social area offered a person several opportunities for use – one did not have to garden to be there.

The youth running through the water sprinkler and having a photoshoot in the sunset demonstrates how the multifunctionality exceeds the facilitated activities. The public access appears to have realized activities in the garden that were not planned for, but where people themselves defined their own understanding and use of the materials the garden offers. The social spots also offered a place for individual interpretation. Its flexibility to transform from a casual seating area to an event site for games and barbeque created opportunities to attract different user groups, from families on picnics on a regular weekday to youth attending events. This potential can be due to the simple design with not too many big objects that determine the use of the space. The conflict between the CSA and EdiCitNet revealed how the flexibility of the main social area gave room for the temporary solution of the seating area made by hay, and how it fostered a democratic process due to the possibility and the consciousness that it could be changed at a later stage. While the social area was flexible, the growing area made out a fixed framework for the use of the space. This balance between the fixed growing area and the flexible social area, where the latter gives room for temporality, transformation and multiple use that is enhanced by the fixed activity (gardening), is what can be argued to elevate the multifunctionality of the garden to attract a diversity of users. The growing area is in one way a fixed framework, yet it poses a seasonal temporality. Gardening as a seasonal activity allows for change in structure and types of vegetables to grow. This temporality fostered interaction where the CSA needed to collaborate on what to grow for the next season.



### Collective creation of space

Scholars argue for a bottom-up creation of community gardens to ensure a common project where it is possible to participate in the building of a neighbourhood, where the space can be produced according to their needs and visions (Baker, 2010, p. 322; Eizenberg, 2012, p. 779). The CSA as a local initiative has played an important role in keeping Linderud Community Garden as a bottom-up project. They make out the biggest individual group in the garden and have a strong ownership due to establishing a garden on Linderud Manor was their initiative to begin with. The collaboration with EdiCitNet led to a collective creation of space. It was EdiCitNet who had the economic resources to realize the garden and having a social area was important for their research project. Rather than forcing a top-down decision of implementing a permanent social area, the collective collaboration led to a de-escalation of conflict and shared ownership at Linderud Community Garden. By including the CSA in shaping the space and compromising on temporary seating furniture made them become a part of the decision-making. This led to an experienced based decision, where the permanent seating area is now a common project with shared ownership. The mutual respect regardless of economic resources showed in this case illustrates the preconditions Fincher et al. (2014, p. 23) believe are needed to foster intercultural interaction: where people are experienced as the same status, share a common project and has the potential to become friends in a non-competitive environment.

The garden being shared in many plots and having various member organizations resulted in the collective creation of the garden as one unit, where they had individual responsibility and right to shape their plots as they wanted while being conscious that they are a collective of gardeners sharing the same space that is represented as one. Furthermore, inviting neighbours to gardening events facilitated for their contribution to the shaping of the space, such as making scarecrows and planting berry bushes.

### *Summary*

The physical configuration of Linderud Community Garden has enhanced the interaction between diverse groups by offering a site for members as well as the public to use, where the location and the accessibility of the site has been crucial to invite a diverse user group, particularly from the public. Meaningful interaction occurred especially between members and was elevated by being located to adjacent social functions, where a kitchen has been of importance. Challenging topography and gardening as a physical activity were not of significant barriers, as the garden also had a strong social attraction for people who were not in physical shape to garden. The latter underlines the importance of the garden offering

multifunctional use, both for everyday activities and different types of events. The physical configuration of different plots created a bottom-up creation of landscape, where the gardeners decided themselves how they tend their plot while also remaining a part of the garden as a collective.

### *5.3 How does the social organization of Linderud Community Garden support interaction?*

#### *Member structure*

The membership structure of Linderud Community Garden makes out a diverse group of users that frequented regularly. This regularity increases the chance of people running into each other and exchanging chance encounters. The garden thus facilitates repetitive and structural encounters that could potentially foster friendship across ethnicities (Amin, 2002, p. 967), especially when visits are arranged to be at the same times, e.g. through the organizations or as programs. The member structure of Linderud also secures a high representation of minorities, and consequently makes the place more relatable and inclusive for other minorities.

The structure further calls for collaboration on how to use and share the garden – where the structural collaboration today is limited due to the lack of a common platform. The member structure has on the other hand encouraged personal collaboration, especially between the entrepreneurs and small organizations who are more reliant on help to keep up the gardening over the summer. Collaboration also occurs in-between CSA members through volunteer workshops.

According to Christensen et al. (2019, p. 241) a garden lowers the threshold of diverse interaction due to its ability to build trust and respect among fellow users and create an inclusive and diverse space where there is no socio-economic hierarchy. This claim is supported by the diversity of members that use the garden. Although it is not within this thesis scope to tell how they perceive each other, their frequent presence indicates an ownership and comfort over the garden in co-presence. One explanation of this finding is that the member structure facilitates for a diversity and a “right” to be there, but also a commitment to frequent often, which fosters ownership over time.

The membership structure through organization has shown to be important as they are able to encourage fellow users to participate, especially when it comes to minorities and youth. A

member structure can on the other hand cause conflicts if there is an imbalance in ownership and power structure, by the way the CSA felt that EdiCitNet was someone from the “outside” trying to overrun others by pushing for a social space. Nevertheless, this conflict shows that conflicts also can be a source for collaboration and to even build a stronger community. On the contrary, the membership structure hinders persons who do not feel connection to any of the organizations or do not have the economic resources to join the CSA to participate as a gardener.

### The public and members

The public accessibility has invited non-members to use the garden for different types of recreation. When members used the public accessible garden, they also became a part of the public and were approachable by everyone. Non-members crossing paths with gardeners encouraged interaction out of curiosity and by knowledge exchange.

29% of the recreational users were non-gardeners (see table 5). Applying Oldenburg’s (1989) criteria for inclusiveness, the garden can be considered inclusive in terms of it being accessible for all. However, according to Oldenburg the garden is also exclusive due to the need for membership to garden. Additionally, one can discuss whether publicness is sufficient to create an inclusive place – one does need to feel included, on the contrary, one might feel excluded and not welcome if the person cannot relate to the garden and its activity. The presence of people, visual access to expose vitality and entrances and thresholds together plays an important role together to invite the public to a place.

Poulsen et al. (2017, p. 1420) implies that a publicly accessible community garden can serve as a site for informal education through interaction with passerby. Indeed, many of the passersby of Linderud Community Garden are interested in the garden’s activity and how they run it. This interaction is facilitated by having a garden site for co-presence, while the interaction must be initiated by the persons themselves. Approaching strangers is easier on events that facilitate for social interaction and has a host, compared to a normal day where people are gardening on their own plots and where they do not operate as a “host” for anyone.

### Recruitment of underrepresented groups through educational programs

Educational programs through organizations and summer jobs have been important to recruit youth to use the garden. This introduction to the garden leads to more recreational use by

youth. Educational programs at Linderud also involve people in job training. The social organization enables different types (the other organizations and the CSA as well) of groups to be present in the garden together and to interact.

### *Summary*

The membership structure of Linderud Community Garden contributes to a continuous presence of people in the garden, fostering collaborative interaction between gardeners, and increases the possibilities for interaction between members and non-members, as members can ask gardeners about their activity. The structure has been of crucial importance for inclusion of underrepresented groups by targeting them and facilitating their gardening.

## 5.4 Main-RQ: How can a urban community garden support social interaction in a diverse neighbourhood?

The thesis contributes to new insight into the relationship between the physical and the social organization of a community garden. How these two aspects are organized determines what types of users attend the garden, and whether they reflect the neighbourhood's diversity. Oldenburg (1989) uses the term accessibility to argue for accessible hours of the site, while I propose a wider understanding as crucial to secure social inclusion. Accessibility needs to be defined in terms of hours accessible, mobile accessibility, visual accessibility, and social accessibility.

The social organization of a community garden lays the foundation for who has the accessibility to interact in the garden. When organized with memberships, a community garden needs to be aware of which user groups are included. The case study demonstrates the importance of social structure for inclusion on how targeted groups get involved (youth), while groups that have not been actively targeted consequently are missing (elderly). A garden thus needs to actively involve groups that reflects the needs of diverse neighborhoods, which often includes minority families living in crowded dwellings in need for outdoor space. A membership structure poses a risk of exclusion if membership is determined by those who are the dominating – where sociocultural aspects such as motivation (sustainability, health etc.) can dominate over social inclusion, or where economic resources restrict underrepresented groups from becoming a member neighbourhood (Pearson & Firth, 2012). Membership thus poses a risk of exclusion if the user groups are dominated by people who do not represent the diverse neighbourhood. This can lead to cases with non-local users and result in an alienation of the locals where they are not

represented and even excluded. If represented by a homogeneous group of locals that do not reflect the diverse neighbourhood, the risk of segregation occurs. However, contrary to Oldenburg's (1989) claim that membership causes exclusion, the findings also demonstrate the importance of memberships to secure frequent users and continuity. This in turn contributes to regulars that express vitality, hospitality, and representation and reducing the exclusiveness (Oldenburg, 1989, 33-36). The member structure therefore contributes positively in this case by engaging underrepresented groups and to securing regulars. However, it should be noted that membership based forms of organizations need to be highly context sensitive to avoid exclusion.

The results suggest that a garden's use by underrepresented groups can be greatly enhanced by facilitating a community garden as a publicly accessible green space. The accessibility in turn allows for people in crowded dwellings to use the green space. The presence of the public increases the chance for interaction between gardeners and people with little interest in gardening who have the need or wish to use a green space for other causes, such as recreation or even for mobility, by walking through. Public access to the site is thus of high importance to include and encourage non-gardeners of the neighbourhood to use the space. The accessibility makes people frequent the garden and increases the possibility of chance encounters, or even gets people interested in becoming a gardening member and thus the prospect of meaningful encounters. However, more users also increase the chance for conflicts on the right to the space and how to use it.

A community garden optimizes the interaction when the garden's activity creates synergy effects with social functions outside of the garden. Having a central location makes it possible to combine with other activities. Combining a garden with a kitchen to process the harvest, either nearby or in the garden, can facilitate meaningful interaction across gender, age and ethnicity, as it demands few prescribed physical and social skills. It is also an activity where people can embed their own cultural heritage (Agustina & Beilin, 2017) by cooking and sharing recipes they have cultural connection to. A central location lessens the effort it takes for people to get there, making it more accessible and heightens the potential for people using it.

If a community garden is located centrally, I would argue that it also needs to be publicly accessible and provide for the use by ethnic minorities through an inclusive social organization. Otherwise, having a centrally located garden risks excluding ethnic minorities

and seizing a central space that should serve for the broad public of the diverse neighbourhood. A central space that excludes marginalized groups in the neighbourhood might lead to segregation, where there are differences in who has the right to outdoor green space.

The possibilities of collaboration in a community garden makes it possible to share the labour demanded, making it more inclusive for people with different levels of physical and mental abilities to join. By offering more activities one user has more than one reason to go to the garden – e.g., to be social, and in this way get more ownership to the space, be more present and to engage in interaction with others. Although collaboration in the garden might spread the labour, the effort and responsibility in a garden still demands somewhat frequent visits throughout the season. Peterson (2017, p. 1082, 1072) emphasizes how structural and repetitive encounters have the potential to break stereotypes and challenge prejudice, which makes a community garden suitable for the cause, especially where different groups are encouraged to be members, and the public is invited. Even if people do not interact, simply by being present in the same space creates a sense of community (ibid.).

A garden attracts more people if it is multifunctional in terms of everyday use offering various activities such as social arena and mobility in addition to gardening. In addition to the multifunctional activities, a garden functioning as both a public site and a semi-public site gives the opportunity to cater for different events and use for different user groups.

A publicly accessible community garden has the potential to generate interaction between different ethnicities, gender, and age – where gardening as the main activity is achievable for youth and adults. A community garden in a diverse neighbourhood has the potential to support interaction by facilitating for users to grow vegetables that they have a cultural connection to. To reach out to the diversity of residents, the social structure needs to actively target immigrants, and sub-groups that need it. These are usually women who lack outdoor spaces to meet. However, to create an inclusive space for a broader specter of the neighbourhood more people should be included to generate representation that people can relate to, such and youth and elderly.

A community garden has been shown to have a potential for supporting interaction in a diverse neighbourhood by including the residents in the creation of the garden, giving them ownership to the place, and encouraging them to be present. The collective creation fosters

direct interaction when they build the garden together, but can also has the potential to foster meaningful interaction by future use. As opposed to a public space without membership activity, a community garden has the possibility of including members of underrepresented groups and to assure a regular presence of people and vitality. Accordingly, this can create a synergy effect that welcomes more people to be present and thus promotes the possibilities of interaction.

Drawing on the case of Linderud Community Garden it is evident that an urban community garden has the potential to support social interaction between members of different groups in a diverse neighbourhood.

# 6 CONCLUDING REMARKS



I have in this thesis aimed to identify aspects of a community garden that support interaction in diverse neighbourhoods. Based on a qualitative analysis of the users and the spatial and social organization of Linderud Community Garden, I have demonstrated how accessibility and social targeting make up important factors that should be considered when planning for community gardens in diverse neighbourhoods. The results further indicate that a central location and public access elevates the synergy effects of the garden. This is, however, only possible if the social structure secures inclusion and participation of underrepresented groups in outdoor spaces. By analyzing how people use the garden, I have shown that a multifunctional garden that offers several activities besides gardening has a higher potential of getting diverse user groups, as it attracts a public regardless of gardening interest. More users thus have the opportunity to feel a right to the space, create ownership and increase the chance of presence and interaction. On the flip side, more users with different motivations can also generate conflicts. However, results from the case study illustrate how bottom-up creation of a garden can lead to collaboration and reduce tensions. Linderud Community Garden have demonstrated how a community garden can function as a third place for informal interaction and cultivate a sense of equality amongst a diverse population.

To reach the goals of social inclusion across economic, social, and cultural backgrounds according to the national strategy for urban agriculture (The Norwegian Ministries, 2021), planners can contribute by facilitating community gardens in diverse neighbourhoods. Integrating community gardens into planning practice on a big or small scale, whether in zoning, development projects or placemaking, however demands high context sensitivity. The risk of implementing an urban garden that causes more harm than good for minorities is present when context is not taken into consideration and as a result inclusion can fail. Minorities as an underrepresented group risk exclusion if they are not actively included spatially and socially, which can lead to a segregation of the users of outdoor public space. Additionally, the establishment of a garden itself has the potential for ecological gentrification, and driving away those residents a garden was originally intended for (Braswell, 2018). This thesis is not sufficient to answer one correct way to implement community gardens as there are many aspects that still need to be considered for a specific context. However, it does provide some common features that should be considered when planning for community gardens in diverse neighbourhoods.

While a single case study limits the generalizability of the results, this approach has provided new insights on the correlation of spatial and social organization of community gardens in

diverse neighbourhoods that can contribute to planning practice. This thesis has not covered the experience of the user's perception of each other, nor their relation to the public and whether tolerance has changed. I would suggest further research on these relations to better understand the consequences of the interaction that a public accessible community garden opens for. It is, however, important to note that community garden's contribution to building civic culture and tolerance is on its own insufficient to overcome the structural features that harm historically marginalized groups. Such a goal should be supplemented with economic, political, and social change efforts (Horst et al., 2017, p. 279). Nonetheless, planning for inclusive community gardens in diverse neighbourhoods is still a step towards building civic culture in developing our increasingly diverse cities, as long as they are implemented with care for the context and awareness of the harm it can cause.

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Map source:

FKB data and Cadastre data in UTEM32 Euref89 downloaded from Geonorge march 2021.

Made by Geovekst.

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# APPENDIX



## Intervjuguide – utgangspunkt for koordinatører

### Introduksjon

1. Kan du fortelle litt om motivasjonen bak prosjektet og hva dere ønsker å oppnå?
2. Kan du si litt om hvordan jordet er designet?
  - a. Hvilke fellesstrukturer har dere og hvordan brukes hagen?

### Brukergruppen

3. Hvem er målgruppen deres og hvordan jobber dere for å nå ut til disse?
4. Hvordan jobber dere for å nå ut til underrepresenterte grupper? Både som deltagere og besøkende
  - a. Har det fungert? Hva har ikke fungert?
5. Føler du andre i nabolaget bruker hagen?
  - a. Hvorfor tror du dere har klart å få en variasjon av brukere/hvorfor ikke?
6. Merker du noe til om hagen har skapt noe mer interaksjon mellom naboene?

### Aktiviteter

7. Hvilke av aktivitetene i hagen tror du er årsaken til at flere enn dyrkerne bruker hagen?
8. Er det noe samarbeid mellom de ulike gruppene på jordet?

### Funksjoner

9. Hvilke endringer ser dere fra før og etter prosjektet ble etablert?
  - a. Virkninger på nabolaget
10. Hvordan fungerer hagen som et åpent oppholdssted?
11. Har du opplevd at forbigående stopper for å oppholde seg i hagen?
12. Føler du det er noen utfordringer med prosjektet knyttet til at det er flere som bruker hageområdet?
13. Hvilke tiltak mener du har fungert bra for å oppnå målene deres om å være en møteplass for nabolaget?
14. Har dere opplevd noen utfordringer eller konflikter? Både intern og eksternt.

### Forbedringer:

15. Tror du det er noe bydelen eller kommunen kunne hjulpet til med?

### Avsluttende:

Er det noe du har lyst til å legge til?

## Vil du delta i forskningsprosjektet

### *«Hvordan kan urbane mathager skape interaksjon i flerkulturelle nabolag?»*

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å undersøke hvordan urbane landbruk kan bestå av flere funksjoner enn dyrking, og skape sosiale møteplasser i flerkulturelle nabolag. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

#### **Formål**

Prosjektet er en masteroppgave i by- og regionplanlegging og har som formål å utforske hvordan urbane mathager kan kombineres med andre funksjoner for å tiltrekke seg flere brukere på det samme arealet. Urbane mathager skaper sosial interaksjon på tvers av kulturelle grupper gjennom dyrking og kan bidra til fellesskap og sosial utvikling. Samtidig er det arealkrevende. Prosjektet ønsker derfor å finne ut hvordan slike mathager kan bli et sted som flere enn dyrkerne drar nytte av.

Prosjektets problemstilling er:

*«Hvordan kan urbane mathager skape interaksjon i et flerkulturelt nabolag?»*

For å finne ut av dette skal jeg bruke Linderud gård som case og utforske hvordan gården er organisert og fungerer i praksis. Dette vil bli kombinert med en kartlegging av de fysiske forholdene gården ligger i. Forskningen har som formål å finne ut hvordan urbane mathager kan skape interaksjon mellom ulike kulturelle grupper og hvordan man kan sikre at mathagene brukes av underrepresenterte grupper.

Prosjektet er en masteroppgave i by- og regionplanlegging ved Norges miljø- og biovitenskapelige universitet. Den gjennomføres fra midten av 2021 og har som mål å avsluttes i desember 2021. Opplysningene vil i utgangspunktet kun bli brukt til oppgaven.

Masteroppgaven er en del av det tverrfaglige forskningsprosjektet Cultivating Public Spaces.

#### **Hvem er ansvarlig for forskningsprosjektet?**

Norges miljø- og biovitenskapelige universitet er ansvarlig for prosjektet.

#### **Hvorfor får du spørsmål om å delta?**

For å undersøke hvem som deltar i urbane landbruk skal det gjøres intervjuer med prosjektansvarlige, dyrkere med ikke-vestlig bakgrunn og andre besøkende. Det skal gjennomføres 2-4 dybdeintervjuer med koordinatorene og brukere av Linderud nærmiljøhage.

I tillegg skal det gjennomføres korte pop-up intervjuer med forbigående og besøkende i hagen som ikke er dyrkere.

### **Hva innebærer det for deg å delta?**

Hvis du velger å delta i prosjektet vil jeg å stille deg noen spørsmål som jeg ønsker å forstå mer om. Dette vil være et semi-formelt intervju på ca. 30 minutter. Vi møtes fortrinnsvis fysisk, f.eks. Linderud gård, eller et annet sted etter avtale.

Spørsmålene som vil bli stilt vil være knyttet til din relasjon og aktivitet på Linderud gård. Det er opp til deg hva og hvor mye du ønsker å svare. Det er ønskelig å ta lydopptak og notater fra intervjuet.

### **Det er frivillig å delta**

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

### **Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger**

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrevet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket.

Hvem som har tilgang:

All innhentet data, herunder opplysninger fra intervjuet, vil til enhver tid være lagret på et kryptert verktøy. Navnet og kontaktopplysningene dine vil jeg erstatte med en kode som lagres på egen navneliste adskilt fra øvrige data. Det er kun jeg som vil ha tilgang til informasjonen som er knyttet til deg. Dersom informasjon blir sendt videre vil dette være anonymisert.

I publikasjonen vil du aldri bli nevnt med navn og det vil ikke bli oppgitt personopplysninger.

### **Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?**

Opplysningene anonymiseres når prosjektet avsluttes/oppgaven er godkjent, noe som etter planen er *våren 2022*.

### **Hva gir oss rett til å behandle personopplysninger om deg?**

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra Norge miljø- og biovitenskapelige universitet har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

### **Dine rettigheter**

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke opplysninger vi behandler om deg, og å få utlevert en kopi av opplysningene
- å få rettet opplysninger om deg som er feil eller misvisende
- å få slettet personopplysninger om deg
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger

Hvis du har spørsmål til studien, eller ønsker å vite mer om eller benytte deg av dine rettigheter, ta kontakt med:

- Norges miljø- og biovitenskapelige universitet ved Katinka Horgen Evensen (tlf: 67 23 12 57) eller Christina Wong (tlf: 40 23 73 68).
- Vårt personvernombud: Hanne Pernille Gulbrandsen, [personvernombud@nmbu.no](mailto:personvernombud@nmbu.no)

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:

- NSD – Norsk senter for forskningsdata AS på epost ([personverntjenester@nsd.no](mailto:personverntjenester@nsd.no)) eller på telefon: 55 58 21 17.

Med vennlig hilsen

Katinka Horgen Evensen  
*Prosjektansvarlig*  
(Forsker/veileder)

Christina Ming Kei Wong  
*Masterstudent*

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## Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet «*Hvordan kan urbane mathager skape interaksjon i flerkulturelle nabolag?*» og har fått anledning til å stille spørsmål. Jeg samtykker til:

- å delta i intervju

Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet

---

(Signert av prosjektdeltaker, dato)



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