Factors that influence the continuity and cohesiveness of North-West European Cohousing Communities

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Dissertation submitted to the Cardiff Metropolitan University in partial fulfilment of the requirements for the degree of

Doctor of Philosophy
In
Housing Studies

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Cardiff, United Kingdom
September 2016

The research was undertaken under the auspices of Cardiff Metropolitan University
DECLARATION

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

Signed _______________________________ (candidate)

Date 18.09.2016

STATEMENT 1

This thesis is the result of my own investigations, except where otherwise stated. Where correction services have been used, the extent and nature of the correction is clearly marked in a footnote(s).

Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended.

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Abstract

One of the fastest growing types of intentional community; cohousing aims to provide an enhanced sense of community, while also retaining the possibility for privacy among its residents. Research has shown that cohousing communities have the capacity to foster social and environmental sustainability. Therefore, increasing attention is being given to cohousing options as solutions for multi-generational community living, or for ‘stay-at-home’ choices for older people. Nonetheless, the body of literature on cohousing remains scarce, especially in terms of primary studies investigating the factors affecting its success.

In view of these considerations, this study sets out to determine important factors that influence the long-term success of cohousing communities. Social capital and environment-behaviour theories are used as a frame of reference; whereas in-depth interviews with 46 cohousing residents from 16 different cohousing communities (across four North-West European countries: Sweden, Denmark, the Netherlands and the UK) form the main body of data. In three of these countries, cohousing has a long history, and it is well-established. Desk research, spatial analysis of the physical design, and participant observation supplement the accounts of interviewees.

The findings reveal 16 important factors that influence the long-term success of cohousing. These factors can be categorized under four ‘grand’ themes: motivation; development process; physical design; and environmental sustainability.
Acknowledgements

Thank you to Catherine, John, and Jan- my supervisors. For taking me ‘under your wing’ from the moment I set foot in Cardiff, up until the submission. For being available every time I needed help. For making time to read my drafts; over and over again. For guiding me through this entire experience. For being part of my development as a person.

Thank you to Bron Afon. For supporting me; and granting me freedom throughout this research.

Thank you to my family. For always being there for me, through thick and thin. No matter the distance; and no matter the issues.

Thank you to my friends from back home; and from all over the world. For being close to me throughout this entire research experience, even though sometimes we were physically far away.

And thank you to my ‘Cardiff family’. The ones I met since the first day I arrived in Cardiff; and who have been close to me throughout this journey. People with whom I have spent many wonderful moments; people from all over the world: from Greece; from Norway; from Italy; from the UK; from China; from Spain; from Portugal; from Germany; from France; from Poland; from Turkey; from Holland; from the United States; from Canada; from Nigeria; from Iraq; from Saudi Arabia; from Thailand; from Ukraine; from Brazil; from Sweden; from Denmark; from Sri Lanka; from India; from Hungary; from South Korea; from Slovenia; from the Czech Republic; and from Romania.

You have all made my time in Cardiff a memorable experience. One that will remain close to my heart.

Bucharest, the 17th of September 2016
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Glossary of terms

Abductive reasoning: A kind of logical inference that “typically begins with an incomplete set of observations and proceeds to the likeliest possible explanation for the set” (Thagard, Shelley, 1997).

Coding of data- "classifying or categorising individual pieces of data [...] coupled with some kind of retrieval system" (Babbie, 2007, p.384).

Cohesion: “the act or state of sticking together tightly” (Merriam-Webster Dictionary, 2016).

Cohousing: “resident-developed, -owned, and -managed cooperative communities” (Sullivan-Catlin, 1998, p.11) that “creatively mix private and common dwellings to recreate a sense of community, while preserving a high degree of individual privacy” (Lietaert, 2010, p.576).

Environmental sustainability: “meeting the resource and services needs of current and future generations without compromising the health of the ecosystems that provide them” (Morelli, 2011, p.6).

Focus groups: "organised group discussions which are focused around a single theme” (Byers and Wilcox, 1988, in: Clough, Nutbrown, 2012, p.72), aimed at creating "a candid, normal conversation that addresses, in-depth, the selected topic" (Vaughn, et al., 1996, in: Clough, Nutbrown, 2012, p.73).

Grounded theory approach: "a set of techniques for identifying categories and concepts that emerge from text and linking the concepts into substantive and formal theories” (Bernard, 2013, p.547).

Intentional community: a group of “mostly unrelated people living together and dedicated by intent to specific common values or goals” (Meltzer, 2005, p.2).

Interviews: "encounters between the researcher and informants directed towards understanding informants` perspectives on their lives, experiences, or situations as expressed in their own words" (Taylor S., Bogdan R., 1998, in: Kumar R., 2011, p. 160).
Layout: how specific dwellings/areas are arranged on a site.

Methodology: “the analysis of the principles or procedures of inquiry in a particular field” (Merriam-Webster Dictionary, 2016).

‘Multi-building’ cohousing: Cohousing communities comprised of multiple private and communal dwellings on a site.

Qualitative research: “refers to a thing’s essence and ambience - the what, how, when and where of it [...] the meanings, concepts, definitions, characteristics, metaphors, symbols and description of things” (Berg, 2007, in: Tewksbury, 2009, p.2).

Quantitative research: “a formal, objective, systematic process in which numerical data are used to obtain information about the world” (Burns, Grove, 2005, p.27).

Research: “the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions” (Oxford Dictionary, 2016).

Spatial analysis: an "analytical technique in which researchers map quantitative data that describes geographic units [...]" (Babbie, 2007, p.483) in order to describe "the spatial relationships or spatial interaction between cases" (Haining, 2003, p.4).

Theory: “A set of assumptions, propositions, or accepted facts that attempts to provide a plausible or rational explanation of cause-and-effect (causal) relationships among a group of observed phenomenon” (Business Dictionary, 2016).

‘Single-building’ cohousing: Cohousing communities located in a single dwelling (e.g. in ‘blocks of flats’).

Snowball sampling: “a non-probability sampling method often employed in field research whereby each person interviewed may be asked to suggest additional people for interviewing” (Babbie, 2007, p.184).
1) Introduction

1.1 Rationale and aim of research

In 2012, Cardiff Metropolitan University and Bron Afon Community Housing, a social housing landlord from the Welsh borough of Torfaen, started a partnership aimed at undertaking innovative research on cohousing models and practice. Due to their commitment for improving the housing stock and quality of life in the Welsh boroughs for which they are responsible, organisations like Bron Afon are looking at alternative and innovative housing solutions.

One such alternative to traditional housing, first developed five decades ago in the Scandinavian countries, is cohousing. Rather than collaborative living and intentional communities being seen as a life style choice for alternative people, they are increasing being seen as "an alternative for ordinary people" (Bamford, 2005, p.46); and therefore increasing attention is being given to cohousing options as solutions for multi-generational community living, or for ‘stay-at-home’ choices for older people (UK Cohousing Network, 2013). It is believed that cohousing schemes, through their development, design and management, promote social and environmental sustainability (Meltzer, 2005; Williams, 2005a; Williams, 2008; Brenton, 2013; Canadian Cohousing Network, 2013).

Therefore, the funding organisation (Bron Afon Community Housing) became interested in finding out about ‘good practices’ in cohousing; and their partner (Cardiff Metropolitan University) suggested that the research should investigate North-Western European schemes, where cohousing has the longest history and where findings would be most relevant for the context of Wales. Within the boundaries of this broad aim and the limits of the available budget, the researcher was granted freedom regarding research design, timeline and data collection (see methodology chapter for a comprehensive discussion). These considerations were part of the initial brief; and led to the development of the following research aim for this study:

- Determining factors that affect the long-term success of North-West European cohousing.
As a secondary objective for this study, a number of workshops (with Bron Afon staff and tenants) and field reports (focused on the housing stock of the Welsh Torfaen borough; the area of activity for Bron Afon) were undertaken. They were aimed at giving an initial assessment regarding the potential for developing cohousing in the Welsh context; however, the complexity of such an undertaking means that comprehensive investigations beyond the means of this research study are required. As such, this Thesis will focus solely on the aforementioned main research aim.

Use of the term ‘long-term success’ in this dissertation

‘Long-term success’ is used in this Thesis as a combination of two other terms: continuity and cohesiveness. Since ‘success’ represents a subjective and mostly individual experience in the case of intentional communities, some scholars decided to look at the continuity of the communities in order to determine whether they were successful or not (Shenker, 1986). From the point of view of a developer (such as Bron Afon, potentially) as well, the continuity of such a community is important; as it could represent a decisive factor for their engagement.

The term ‘cohesiveness’ is usually linked to closely united groups, and the factors that are “causing people to be closely united” (Merriam-Webster Dictionary, 2016). A widely used definition is the one developed by Festinger in 1950 (Lott A., Lott E., 1965; Mullen, Copper, 1995), who defines cohesiveness as “the desire of individuals to maintain their membership in a group” (Mullen, Copper, 1994, p.259). In terms of intentional communities such as cohousing, group cohesiveness is a key determinant for their long-term endurance (e.g. Rigby, 1974; Abrams et al., 1976; Shenker, 1986; Meijering, 2006; Firth, 2010).

In addition, throughout the Thesis the term ‘North-West European cohousing’ will simply be written as ‘cohousing’, unless stated otherwise. Some exceptions are useful (especially within headings); but overall, this will avoid repetition and contribute to the fluency of the reading experience.
1.2 Outline of this dissertation

The dissertation is divided into twelve chapters. The first chapter is the introduction, discussing the background, aims and structure of the dissertation. The second chapter introduces the concept of cohousing, discussing its: definition; context for emergence; history; main characteristics; and position in the broader picture of intentional communities. The third chapter discusses the theoretical underpinning for this study. The fourth chapter deals with the methodological approach and research design of the study. The fifth chapter represents the critical review of cohousing literature, examining: how existing research informs this study; and how the gaps in the academic knowledgebase influence the research questions of this study.

The next four chapters correspond to the main themes of the study; each dealing with a number of research questions. The sixth chapter discusses the motives of individuals for participating in cohousing; and their impact on the cohesiveness of the studied communities. The seventh chapter examines how the development process shapes cohousing; and how it influences the cohesiveness of communities. The eighth chapter looks at the physical design of cohousing; and how design measures impact social interaction and cohesiveness. The ninth chapter investigates the environmental sustainability of cohousing from a qualitative perspective.

The tenth chapter summarizes the findings and presents the conclusions of this dissertation, while also mentioning the limitations of the study and suggesting future research. This dissertation ends with the reference list (eleventh chapter) and various annexes (twelfth chapter) used for the purpose of this study.

The following table gives an overview of the structure of this dissertation, main topics, research questions, and overall research techniques used for answering them. For a comprehensive discussion see the critical literature review and methodology chapters.
<table>
<thead>
<tr>
<th>Research Aim</th>
<th>Main Themes</th>
<th>Research Questions</th>
<th>Research Techniques (fourth chapter)</th>
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</table>
| Determining the factors that affect the long-term success of North-West European cohousing | **Motivation** (sixth chapter) | 1) What motivates people to engage in cohousing?  
2) How do the main motives for participation affect the long-term success of cohousing communities?  
3) Can the impact of conflicting motivational priorities in cohousing be lessened? | - Semi-structured interviews with 46 residents of 16 cohousing communities across four North-West European countries (Denmark, Sweden, the Netherlands and the UK); |
| | **Development process** (seventh chapter) | 4) How are cohousing communities being developed?  
5) Does the development process affect the cohesiveness of cohousing communities?  
6) What are the barriers and enablers for the development process of cohousing? | - Visual analysis using GIS software; |
| | **Physical Design** (eighth chapter) | 7) Does the physical design impact the long-term success of cohousing? | - Participant observation. |
| | **Environmental Sustainability** (ninth chapter) | 8) Does cohousing have the capacity to be more environmentally sustainable compared to mainstream living settings? | |

Table 1: Overview of the dissertation’s structure. Source: Author, 2016.
2) The context for cohousing

The purpose of this chapter is to give an overview of cohousing, by discussing its definition, history, and characteristics. Annex V (at the end of this Thesis) provides additional details on the context of cohousing, by discussing its similarities and differences in relation to the other generic types of intentional communities.

2.1 Definition of cohousing

Cohousing communities have been defined as “neighbourhood developments that creatively mix private and common dwellings to recreate a sense of community, while preserving a high degree of individual privacy” (Lietaert, 2010, p.576). Their explicit aim is to create a “socially cohesive and mutually supportive community” (Meltzer, 2005, p.2).

Expanding this view, Fromm defines cohousing as a

“form of living communities based on the very successful villages found in many Scandinavian countries”, where “residents of all ages come together in the desire for a more practical and social home environment” (Fromm, 1991, in: Jeske, 1992, p.6).

In its “effort to resolve competing desires for inclusivity of community and exclusivity of privacy” (Fenster, 1999, in: Scott-Hunt, 2007, p.1), cohousing communities are usually designed as clusters of private homes “around a common house- or shared space and amenities” (Brenton, 2013, p.3). This layout favours a balance between privacy and social contact (Jeske, 1992; Brenton, 2001; Choi, 2004; Meltzer, 2005; Williams, 2005a; Scott-Hunt, 2007; Lietaert, 2010; Sargisson, 2010; Sargisson, 2012; Brenton, 2013); which results in a “combination of the advantages of individual proprietorship with some of the benefits of living in a community with shared spaces and activities” (Sargisson, 2012, p.29).
## Overview of cohousing

<table>
<thead>
<tr>
<th>Definition</th>
<th>Context for emergence</th>
<th>History</th>
<th>Characteristics</th>
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<tr>
<td>“resident-developed, -owned, and -managed cooperative communities” (Sullivan-Catlin, 1998, p.11)</td>
<td>The loss of a sense of community</td>
<td>First Wave (70s): - Emergence of cohousing in Denmark, Sweden and the Netherlands; Values: community and feminism.</td>
<td>The following characteristics are generally valid for cohousing communities, irrespective of their development period:</td>
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<td>that</td>
<td></td>
<td>Second Wave (90s): - Spread of cohousing in North-America; - Emergence of senior cohousing in North-Western Europe; Additional values: security and sustainability.</td>
<td>1. Participatory Process</td>
</tr>
<tr>
<td>“creatively mix private and common dwellings to recreate a sense of community, while preserving a high degree of individual privacy” (Liestaert, 2010, p.576).</td>
<td>The misfit between household options and demand</td>
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<td>2. Design for Social Interaction</td>
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<td>The shortcomings of other communal arrangements</td>
<td>Third wave (2000s): - Spread of cohousing on other continents and in other European countries; Additional values: accessibility and regional adaptability.</td>
<td>3. Existence of Communal Facilities</td>
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<td>4. Self-management of the community</td>
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<td>5. Absence of hierarchy</td>
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<td>6. Separate incomes between residents</td>
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Table 2: Introduction to cohousing. Source: Author, 2016.
A comprehensive definition of cohousing is given by Sullivan-Catlin, for whom cohousing communities

“describe resident-developed, -owned, and -managed cooperative communities in which individual households are clustered around village-like courts and streets and a large common house with shared facilities for group cooking and dining, work, play, social activities, and childcare. Shared gardens, orchards, workshops, and outside recreation areas are also common features. A variety of ownership and financing methods can be used, and the social composition is often a multi-generational mix of singles, families, and elderly persons” (Sullivan-Catlin, 1998, p.11).

This definition encompasses the main characteristics of cohousing; but leaves aside the main scope of the cohousing model, as summarized by Fromm (1991), Meltzer (2005) and Lietaert (2010). Therefore, a combination of these definitions would be best suited to inform a comprehensive study on cohousing. In short, the definition that informs this study considers cohousing as

“resident-developed, -owned, and -managed cooperative communities” (Sullivan-Catlin, 1998, p.11) that “creatively mix private and common dwellings to recreate a sense of community, while preserving a high degree of individual privacy” (Lietaert, 2010, p.576).

One key trait of cohousing is that each family or household own or rent a private dwelling/flat in the community (McCamant, Durrett, 1994; Meltzer, 2005; Markle, 2013). It must be further mentioned that to date two different models of cohousing communities exist: the standard ‘inter-generational’ or ‘family-based’ model, and the senior cohousing model, designed mostly for people in their second half of life (Siciliano, 2009; Brenton, 2013).
2.2 History of cohousing

Most scholars view the beginning of the seventh decade of the last century as the starting point of the cohousing phenomenon; and locate it in Denmark (Jeske, 1992; Sullivan-Catlin, 1998; Brenton, 2001; Crabtree, 2005; Meltzer, 2005; Williams, 2005a; Lee, 2006; Meijering, 2006; Poley, 2007; Scott-Hunt, 2007; Williams, 2008; Firth, 2010; Lietaert, 2010; Tchoukaleyska, 2011; Sanguinetti, 2012; Markle, 2013), where the first two ‘official’ cohousing communities emerged (Jeske, 1992; Brenton, 2001; Sargisson, 2010; Sargisson, 2012).

Two articles published in Danish newspapers had an important influence for the stimulation of the cohousing movement:

- ‘the missing link between utopia and the dated one family house’ (ibid.), which was based on the failed attempt to build a community of about a dozen of houses around a swimming pool and common dwelling in the 60’s in Copenhagen (Jeske, 1992);

- and ‘children should have one hundred parents’ (Jeske, 1992; Sargisson, 2010; Sargisson, 2012), an article emphasizing the advantages of child-care in a safe, communal setting (Jeske, 1992).

The positive feedbacks for the two articles, coupled with the prior experience from the failed attempt to develop a cohousing community in Copenhagen, led to the emergence of three cohousing communities in Denmark between 1972 and 1976 (Jeske, 1992; Brenton, 2001).

A few scholars consider Sweden as the birth place for cohousing (Choi, 2004; Vestbro, 2010; Bestakova, 2011), mentioning about a dozen dwellings with cohousing features that were built in Sweden between the 30’s and 60’s. They were inspired by Soviet communal attempts, and the emerging feminist movement (Choi, 2004; Vestbro, 2010; Sargisson, 2012). These dwellings were developed with the main purpose of improving the lives of working women, through the common meal system and child-care facilities (Vestbro, 2010).
‘Typical’ cohousing communities in Sweden emerged in the 70s, after the management of the ‘Hasselby family hotel’ was taken over by its tenants (1976); and after the development of ‘Stacken’, the first purpose-built cohousing community in Sweden (ibid.).

Some studies reveal three developmental waves of the cohousing model: the first is linked to the emergence of the first cohousing communities in Denmark, Sweden and the Netherlands (Sargisson, 2010; Vestbro, 2010; Williams, 2005a), which were mainly based on communitarian and feminist values (Williams, 2005a; Choi, 2004).

The second wave is related to the publishing of McCamant and Durrett’s book ‘Cohousing: A Contemporary Approach to Housing Ourselves’, which enabled the spreading of the cohousing phenomenon on the American continent (Jeske, 1992; Sullivan-Catlin, 1998; Brenton, 2001; Crabtree, 2005; Meltzer, 2005; Williams, 2005a; Williams, 2008; Siciliano, 2009; Sargisson, 2010; Bestakova, 2011), with an increased focus on security and sustainability (Williams, 2005a). It is important to mention, that in the same time period the first cohousing models for seniors (people in their second half of life) were developed in Northern Europe (Choi, 2004; Vestbro, 2010; Brenton, 2013), as an alternative to traditional sheltered housing schemes.

The third wave is linked to the emergence of cohousing communities in the Pacific Rim, South-East Asia, and in some other European countries, like Italy and the United Kingdom (Williams, 2005a; Bestakova, 2011); and is characterized by its emphasis on accessibility, sustainability, and regional adaptability (Williams, 2005a).

### 2.3 Key characteristics of cohousing

The first edition of McCamant and Durrett’s book identifies four key characteristics of cohousing (McCamant, Durrett, 1994; Sullivan-Catlin, 1998; Williams, 2008; Tchoukaleyska, 2011; Sanguinetti, 2012); later to be expanded to six (Meltzer, 2005; Meltzer, 2010; Lietaert, 2010; Bestakova, 2011; Sargisson, 2012) in order to clearly emphasize the delineation between cohousing and communes with charismatic/spiritual leaders (Meltzer, 2005). These
six characteristics are: the participatory process; the design for social interaction; the common facilities; the self-management of the community by its residents; the absence of a formal hierarchy; and separate incomes among residents.

a) The participatory process

A crucial feature of cohousing communities is the participatory process, meaning that the future residents decide together with various specialists the design and development characteristics, as well as the principles on which the future community will be based (Sullivan-Catlin, 1998; Bamford, 2004; Meltzer, 2005; Meijering, 2006; Lietaert, 2010; Tchoukaleyska, 2011). This is a time-consuming and often challenging process (Sullivan-Catlin, 1998; Meltzer, 2005); however it ensures that the resulting project will correspond to the desires and needs of the residents (Meijering, 2006; Durrett, 2010; Sargisson, 2012).

b) Design for social interaction

The physical design of cohousing communities usually entails one common feature:

“a neighbourhood setting for the dwellings and the common spaces, one that has come about by design and agreement rather than by default” (Bamford, 2004, p.2).

Physical design plays a crucial role in the life of cohousing communities through its capacity for fostering social interaction, thus enhancing the sense of community (Meltzer, 2005; Williams, 2005a; Durrett, 2010; Lietaert, 2010; Sargisson, 2010). This is achieved through a number of design measures:

- locating the common house, the symbol of most cohousing communities, as well as other shared facilities centrally to the site (Jeske, 1992; Meltzer, 2005; Scott-Hunt, 2007; Williams, 2008; Sanguinetti, 2012; Sargisson, 2012);

- corralling of vehicles at the periphery of the site, in order to foster casual interaction, enhance the safety of children, and encourage non-motorized transport modes (Sullivan-
Catlin, 1998; Bamford, 2004; Meltzer, 2005; Williams, 2005; Scott-Hunt, 2007; Lietaert, 2010; Sargisson, 2010);

- provision of backyards for individual homes, as a mean of exercising personal privacy (McCaman, Durrett, 1994; Sullivan-Catlin, 1998; Meltzer, 2005; Williams, 2005a).

c) Existence of Communal facilities

Communal facilities are central to the idea of cohousing; usually representing the main hub for socialization and community life (Sullivan-Catlin, 1998; Fromm, 2000; Torres-Antonini, 2001; Crabtree, 2005; Williams, 2005b; Sanguinetti, 2012; Riseborough, 2013). For most communities, these shared facilities are clustered in a communal dwelling, including at least one kitchen and dining room for shared meals (Crabtree, 2005; Meltzer, 2005). Shared facilities can also include guest bedrooms, storage rooms, entertainment rooms, shared laundry, library, exercise room, children’s playrooms; and workshops, as well as outside spaces such as vegetable gardens and children’s play areas (Jeske, 1992; Sullivan-Catlin, 1998; Crabtree, 2005; Meltzer, 2005; Scott-Hunt, 2007; Williams, 2005a; Williams, 2008; Sargisson, 2010; Sanguinetti, 2012; Sargisson, 2012).

d) Self-management of the community

Cohousing residents are involved in all activities and decision-making processes needed to run the community on a daily basis (Meltzer, 2005; Williams, 2005a; Lietaert, 2010; Sargisson, 2010; Tchoukaleyska, 2011; Sargisson, 2012). Together, they take “decisions on finance, [...] set guidelines for the admittance of new members, and [...] address common concerns” (Tchoukaleyska, 2011, p.237). Cohousing groups are usually “conceived, initiated and, entirely or predominately, controlled by those who reside in it” (Fromm, 1991, in: Scott-Hunt, 2007, p.3). As such, “resident participation [...] is formalized and encourages greater social interaction” in cohousing communities (Williams, 2005a, p.147).

Studies suggest that in 98% of the cohousing groups some work requirements are expected from their members (Sargisson, 2010); although only about “12.5% of cohousing communities enforce some work requirements (i.e. have penalties for noncompliance) and
31% have a system for buying out of work requirements” (Margolis & Entin, 2011, in: Sanguinetti, 2012, p.12). These working requirements are necessary for maintaining the ‘community’ character of the group; are mostly separate from any financial return; and are part of the formal tenancy or ownership agreement (formulated in working hours per month) (Sargisson, 2010). Such labour expectations include “babysitting, preparing a community meal, gardening, book-keeping, taking older members shopping, dealing with visitor enquiries and building maintenance” (ibid., p.13). Most of these tasks are arranged by specifically designed committees or working teams (Sullivan-Catlin, 1998).

e) Absence of hierarchy
Cohousing schemes are formed on the backbone of democratic decision-making processes (Meltzer, 2005; Williams, 2005; Bamford, 2004). The non-hierarchical structure means that “responsibility for decisions is shared by the community’s adults” (Sargisson, 2012, p.35); and that “all members have an opportunity for input” (Meltzer, 2005, p.5). Decisions can either be taken by consensus, majority voting, or ‘hybrid’ approaches (Lietaert, 2010). Although the emergence of hierarchies is a natural process in communities, the decision-making mechanism is in theory “created to ensure that everyone gets a fair opportunity to express their ideas” (Lietaert, 2010, p.578).

f) Separate incomes
One of the key differences between cohousing and communes is about financial management: in cohousing the incomes of residents are separate, and no ‘shared economy’ system is in place (Meltzer, 2005; Lietaert, 2010; Sargisson, 2012). Residents are either owning or renting their private homes, and generate their own financial means (Meltzer, 2010). The sharing of income between households is highly unusual (ibid.).

Despite of the lack of income sharing schemes in cohousing, the sharing of responsibilities (like cooking, maintenance works, gardening or childcare) is seen as an important method for: creating a sense of community, socializing and making bonds; reducing daily chores for individuals; saving money; and protecting the environment (Williams, 2005a; Scott-Hunt, 2007; Firth, 2010; Lietaert, 2010; Durrett, 2010; Sargisson, 2010; Sanguinetti, 2012).
3) Literature review: the theoretical basis for the research

According to the prevalent view from the literature, the scope of cohousing is to create a supportive setting that enhances the sense of community, but also allows for personal privacy (Jeske, 1992; McCamant, Durrett, 1994; Sullivan-Catlin, 1998; Brenton, 2001; Torres-Antonini, 2001; Meltzer, 2005; Williams, 2005a; Lee, 2006; Hunt, 2007; Lietaert, 2010; Sargisson, 2010; Tchoukaleyska, 2011; Sanguinetti, 2012; Sargisson, 2012). Physical design is considered a key factor backing this scope; by:

- fostering social interaction, thus enhancing the sense of community (Fromm, 2000; Marcus, 2000; Torres-Antonini, 2001; Meltzer, 2005; Williams, 2005b; Scott-Hunt, 2007; Glass, 2009; Siciliano, 2009; Lietaert, 2010; Sargisson, 2010);

- and also allowing the possibility for privacy, when needed (Palm-Linden, 1992; Fromm, 2000; Marcus, 2000; Torres-Antonini, 2001; Williams, 2005b; Bouma et al., 2009; Jarvis, 2011).

The important role of physical design for cohousing is acknowledged by Charles Durrett, one of the initiators of the cohousing movement in the US, who emphasizes that

“while the participatory process establishes the initial sense of community, it is the physical design that sustains it over time” (Durrett, 2010, p.69).

However, some scholars have come to the conclusion that while physical design is an important factor in the success of cohousing; by itself it is not sufficient for the formation of cohesive communities (Torres-Antonini, 2001; Meltzer, 2005; Bouma et al., 2009; Jarvis, 2011; Jarvis, 2015). Jarvis, for example, considers common activities, core values, sharing and bonds as being more important than physical design (Jarvis, 2011). She concludes that cohousing is defined by interactions, more so than by the built environment, rejecting the claims

“often made from architectural observations alone, that proximity and social contact [influenced by physical design] are sufficient to cultivate conviviality and cooperation between residents” (Jarvis, 2011, p.573).
In view of the main aim of this Thesis, this chapter will detail the above considerations; discussing two important theories underpinning the potential factors that affect the success of cohousing:

- on one hand, theories that look at the social character of the built environment, and its impact on behaviour patterns (production of space theory; environment-behaviour theory; pattern language theory). These form the basis for understanding the capacity of physical design for influencing the success of cohousing;

- and theories that look at the link between the level of interaction, and the development of trust, reciprocity and bonds between neighbours (social capital theory). These form the basis for understanding how higher levels of interaction and participation can positively influence the cohesiveness and success of cohousing.

This chapter will be divided into three main sections: the first one will deal with the link between the built environment and human behaviour patterns. It will start with a discussion on how the built environment is generated by social structures; then proceeding to investigate how it can influence behaviour patterns. Limitations to the influence of the built environment on behaviour lead to the second main section of this Thesis, looking at the impact of interactions and participation on the social cohesiveness of communities. This is related to social capital theory; and its premises, criticism, and viability for the case of cohousing will be examined throughout this second main section. The last main section will present the conclusions of this chapter.

It must also be mentioned that the critical review of the cohousing literature (how it informs this study; their findings and limitations, and the resulting gaps in the knowledgebase) will not be part of this chapter. For the fluidity of the discussion, it will be tackled separately, in the fifth chapter of this Thesis.
3.1 The social character of the built environment, and its impact on behaviour patterns

In discussing the impact of physical design on the long-term success of cohousing, we start from the premise that the built environment has the capacity to influence the behaviour of individuals. The highly influential (Kilian, 1998; Robinson, 2001; Richardson, Jensen, 2003; Simonsen, 2005; Pugalis, 2009) works of Hillier and Hanson (1984), and Lefebvre (1984), represent a starting point for this discussion; both examining the built environment as a product of social structures and relationships.

Following this, the discussion turns to environment-behaviour theories - generally (Abu-Ghazzeh, 1999; Abu-Ghazzeh, 2000; Marcus, Cameron, 2002; Farida, 2013; Can, Heath, 2016), and Christopher Alexander’s pattern language theory - particularly (Alexander et al., 1977; Alexander, 1979; Terlouw, 1993; Torres-Antonini, 2001); who deal with the impact of the built environment on behaviour and social encounters. Drawing upon these works, it is argued that the purposeful physical design of cohousing communities has the capacity to ‘manage’ social encounters on the site. As such, it has the potential to influence the long-term success of cohousing.

3.1.1 The built environment as a product of social structures

Hillier and Hanson’s ‘Social Logic of Space’ (1984) emerged as a critic to modern architectural discourse, which from the point of view of the authors disregards the social dimension of the built environment. They came to the conclusion that (usually) the built environment is the materialization of the principles underpinning the functioning of a specific society; with the capacity to influence behaviour patterns, and empower or disempower some people (Hillier, Hanson, 1984; Robinson, 2001).

Another highly influential work on the topic (Kilian, 1998; Richardson, Jensen, 2003; Simonsen, 2005; Pugalis, 2009) is Henri Lefebvre’s ‘The Production of Space’; which emerged as a critique towards the lack of discourse analysing space in terms of the social relations embedded in it (Lefebvre, 1974). Therefore, the author’s aim is to produce a theory
that determines how societies generate space, “by bringing the various kinds of space and the modalities of their genesis together” (ibid., p.16).

Of importance to the current discussion is that both works bring to the fore the consideration that there is an interchangeable link between the built environment and society. Both focus particularly on the ways in which society generates the built environment; the latter being considered as the dimension for re-enacting social principles and relationships (Hillier, Hanson, 1984; Lefebvre, 1974). Hillier and Hanson emphasize that understanding this link between society and the built environment represents a prerequisite for further discussing the influence of the built environment on behaviour patterns:

“only when this [built environment as a representation of society] is understood is it possible to make a theoretical link to patterns of use” (Hillier, Hanson, 1984, p.8).

Space as a product of society: Lefebvre remarks that civilizations throughout history have shaped their built environment in order to reflect the main principles of their society (Lefebvre, 1974). As such, the built space becomes part of the foundation of important societies (ibid). His theory starts from the premise that the built environment functions as an underpinning for social principles and relationships (ibid.). It emphasizes that

“social relations, which are concrete abstractions, have no real existence save in and through space. Their underpinning is spatial” (Lefebvre, 1974, p.404).

Therefore, the author highlights the need for an analysis of the link between this spatial underpinning and the social relationships it supports- the ‘social character of space’ (Lefebvre, 1974). Hillier and Hanson discuss this social character of space in detail. They remark that a society generates its built environment in two ways:

- by arranging groups in space following certain guidelines that reflect the structure (e.g. the spatial segregation of classes in settlements) and lifestyle of the society (e.g. spatial segregation of sexes in individual buildings). In this regard the built environment can be
considered as a tool that can be used for empowering some groups, while disempowering others (Hillier, Hanson, 1984);

- and by arranging the natural space in a ‘physical milieu’ that follows certain patterns who reflect generic principles related to the culture of the society (ibid.). For example, the central location of churches and cathedrals in medieval settlements (throughout Central and Western Europe), representing convergence points for important lanes and roads (ibid.). This spatial arrangement is a symbol and reflection of the important spiritual and laic role played by the Church during those times.

Consequently, the authors indicate that evolutions in society are followed by changes in the built environment (ibid.). For example, the extensive development of suburbs in the Western world is strongly correlated with the possibility of using auto vehicles for commuting to work. This makes them further highlight the link between society and space:

“different types of social formation, it would appear, require a characteristic spatial order, just as different types of spatial order require a particular social formation to sustain them” (Hillier, Hanson, 1984, p.27).

The authors summarize these considerations by concluding that one of the general principles of the built environment is related to its embodiment of ‘social knowledge’, described as “the unconscious organising principles for the description of society” (Hillier, Hanson, 1984, p.184). In other words, they consider the built environment as the spatial expression of the organising principles that govern a society.

Space as an influencing factor of society: Even though both works are primarily focused on the built environment as the underpinning of societal principles and structures; they also briefly consider the capacity of the built environment for influencing behaviour patterns.

Lefebvre mentions that besides being a resultant of society, the role of the built environment “is less and less neutral, more and more active, both as instrument and as goal, as means and
as end” (Lefebvre, 1974, p.411). Therefore, he also highlights the interchangeable link between the built space and society, considering the former “at once a precondition and a result of social superstructures” (ibid., p. 85).

Hillier and Hanson come to a similar conclusion, detailing their argument. They consider that the built environment is not only a simple reflection of the society; rather that it has an interchangeable relation with it. That is because the built

“space has its own laws and its own logic, it can also act as a system of constraints on the society […] It can answer back. It does not obey some set of social determinants without imposing some of its own autonomous reality” (Hillier, Hanson, 1984, p.199).

Consequently, after discussing at length how society generates space, Hillier and Hanson have asked themselves how space can also determine society (Hillier, Hanson, 1984). Even though addressing this issue was beyond the scope of their work (or of Lefebvre’s), they mention the initial results from one of their empirical studies concerned with this question. Comparing two types of areas from London (traditional streets versus recently developed areas); the findings reveal more social encounters and more ‘liveliness’ in the traditional areas (ibid.). These results were replicated in case of different areas; and remained largely constant regardless of densities and weather. As a potential explanation, they mention that the spatial arrangement of the traditional systems is more integrated; promoting longer pedestrian journeys that increase social encounters. This makes the author’s affirm that the built environment has the capacity to alter society as well (by influencing behaviour patterns); and not only vice-versa.

Due to their aim, both works discussed so far do not examine more in detail the potential effects of the built environment on behaviour patterns. Therefore, in order to better understand the influencing capacity of the built environment in this regard, the discussion will turn towards Christopher Alexander’s work and environment-behaviour studies (the latter being specifically aimed at researching this capacity). Subsequently, the theoretical arguments will be extrapolated for the case of cohousing.
3.1.2 The built environment as an influencing factor for behaviour patterns

Similarly to Lefebvre (1974) and Hillier and Hanson (1984), Alexander acknowledges the interchangeable link between society and the built environment (Alexander, 1979). While the works of the former are centred on the ways in which the built environment is generated by society; Alexander’s books are focused on the ways in which the built environment influences behaviour patterns, and especially how it generates a ‘quality without a name’ (a key characteristic of ‘good design’) (Alexander, 1966; Alexander et al., 1977; Alexander, 1979; Terlouw, 1993). There are three considerations around which Alexander’s theory is formulated:

- that physical design can influence behaviour patterns;
- that physical design is not the sole determinant of behaviour;
- and that incorporating patterns into a coherent design system (‘language’) results in ‘good’ design.

This section will deal with the former two of these considerations; as they represent the theoretical underpinning for analysing the impact of physical design on the long-term success of cohousing. Findings from environment-behaviour studies (as they are aimed at determining the capacity of physical design for influencing behaviour patterns) will be part of the discussion from this section as well.

a) Capacity of the built environment to influence behaviour patterns

On a similar note with Hiller and Hanson (1984) and Lefebvre (1974), Alexander considers that physical geometry is secondary in importance to the events happening in a built environment:

“each town, each neighbourhood, each building, has a particular set of these patterns of events according to its prevailing culture” (ibid., p.68); and therefore “a building or a town is given its character, essentially, by those events which keep on happening there most often” (Alexander, 1979, p.66).
He notices that there is a link between the built environment and those recurring events: “each pattern in the space has a pattern of events associated with it” (ibid., p.91). In other words, each behaviour/activity/event is “interlocked with certain geometric patterns in the space” (ibid., p. X). Through the term ‘goodness of fit’ from one of his earlier works (Alexander, 1966) and the extensive design guidelines devised for different scales of the environment (region, city, neighbourhood, street, dwelling) (Alexander et al., 1977), Alexander implies that the built environment can influence these pattern of events, and vice-versa.

The term ‘goodness of fit’ is based “on the idea that every design problem begins with an effort to achieve fitness between two entities: the form in question and its context” (Alexander, 1966, p.15). Because of this,

“the pattern of space is, precisely, the precondition, the requirement, which allows the pattern of events to happen. In this sense, it plays a fundamental role in making sure that just this pattern of events keeps on repeating over and over again, throughout the space [...]” (Alexander, 1979, p.92).

This means that specific spatial designs are best suited for certain behaviour/activities; or as Alexander indicates, “each pattern of relationships in space is congruent with some specific pattern of events” (ibid., p.93). In view of this, Torres-Antonini suggests that

“providing less fitting [spatial] settings equals to putting obstacles for behaviour, which then needs to be overcome by intense motivation to perform it” (Torres-Antonini, 2001, p.61).

In other words, spatial settings influence behaviour; and if certain behaviours are seen as desirable for a specific setting (e.g. promoting more social interaction in neighbourhoods), then ‘reflecting’ this aim in the spatial arrangement will contribute to the desired outcome (e.g. encouraging social interaction through design of the neighbourhood: pedestrian streets; ‘leisure’ areas; traffic-calmed zones; commercial facilities within walking distance etc.). This
view of Alexander and Torres-Antonini is supported by more recent empirical studies looking at the impact of the built environment on the behaviour of individuals.

The findings from the empirical works of environment-behaviour scholars such as Abu-Ghazaleh (1999; 2000), Markus and Cameron (2002), Bouma et al. (2009), Farida (2013), and Can and Heath (2016), also suggest that the built environment can influence behaviour patterns. In a study of a residential neighbourhood in Jordan, Abu-Ghazaleh determined that the built environment has the capacity to influence behaviour patterns:

"site design, including the layout of buildings in residential neighbourhoods, has profound effects upon people's behaviour and communication networks" (Abu-Ghazaleh, 1999, p.41). This is because "the nearby environment is the basis of communication and identification of common interests between inhabitants" (Abu-Ghazaleh, 1999, p.66).

Markus and Cameron notice this correlation as well, stating that “buildings are also social objects in that they are invested with social meaning and shape social relations” (Markus, Cameron, 2002, p.1). Can and Heath make a similar point, remarking that pedestrian streets and open ‘transition spaces’ between private and public areas inside some neighbourhoods of Izmir (Turkey) increase social interaction and cohesiveness (Can, Heath, 2016).

Robinson mentions the need for deinstitutionalisation in the US; and highlights the need for a different physical design as a starting point: “we may be able to design places that support different, more democratic forms of institutional organization" (Robinson, 2001, p.2). At the basis of his argument lies the assumption that “buildings seem to play an important role in supporting, impeding and directing behaviour” (Hillier, 1996, in: Robinson, 2001, p.2).

The perspective of Alexander and environment-behaviour scholars regarding the influence of the built environment on behaviour patterns is echoed in the case of cohousing as well. The purposeful design of cohousing has two aims:
- to foster interactions between residents; through key principles like physical proximity, opportunities for casual contacts, and availability of shared spaces (Bouma et al., 2009). According to Williams’ research, “the design approach used in cohousing also adopts most of the architectural and urban design principles identified in the literature as being crucial to high levels of social interaction in neighbourhoods” (Williams, 2005b, p.196). As such, Bouma et al. indicate that the social relations of cohousing residents “can be positively influenced by the physical design” (Bouma et al., 2009, p.3).

Design measures (generated by the above principles) such as pedestrian walkways, off-site parking, and visibility and access to of communal areas, are purposefully used for achieving this aim (Sullivan-Catlin, 1998; Fromm 2000; Marcus, 2000; Torres-Antonini, 2001; Bamford, 2004; Meltzer, 2005; Williams, 2005a; Williams, 2005b; Scott-Hunt, 2007; Glass, 2009; Lietaert, 2010; Sargisson, 2010). In this regard, cohousing can be considered as “purposely designed for social connectivity and support” (Torres-Antonini, 2001, p.17);

- to give the possibility for personal privacy as well, when required (Palm-Linden, 1992; Fromm, 2000; Marcus, 2000; Torres-Antonini, 2001; Williams, 2005b; Bouma et al., 2009; Jarvis, 2011). The individual proprietorship of houses/flats is complemented by design measures (e.g. ‘buffer zones’ in front of private houses; a gradual transition from private to public spaces) specifically aimed at this aim (Fromm, 2000; Marcus, 2000; Torres-Antonini, 2001; Williams, 2005b).

These two aims underpinning its purposeful physical design are directly correlated to the crux of cohousing: to create an enhanced sense of community, hence design measures fostering interaction; while at the same time allowing the possibility for personal privacy, hence design measures that enhance privacy (Jeske, 1992; Brenton, 2001; Choi, 2004; Meltzer, 2005; Williams, 2005a; Scott-Hunt, 2007; Lietaert, 2010; Sargisson, 2010; Sargisson, 2012; Brenton, 2013). In this regard, physical design can be considered as a spatial instrument for encouraging behaviour patterns that correspond with the aspirations of cohousing.
(McCamant, Durrett, 1994). As such, the role of the built environment in cohousing is concurrent with the theoretical formulations of Alexander and environment-behaviour scholars regarding the capacity of physical space for influencing (desirable) behaviour patterns.

Furthermore, when purposefully created, the physical design of cohousing is supposed to also reflect the values, desires, and needs of its future residents (Sullivan-Catlin, 1998; Brown, 2004; Meltzer, 2005; Williams, 2005b; Meijering, 2006; Durrett, 2010; Sargisson, 2012). This can be achieved through customized spatial arrangements, and communal facilities corresponding to the interests and needs of its residents (see, for example: Meltzer, 2005; Williams, 2005a; Sargisson, 2012). Therefore, the built environment in cohousing can be seen as a smaller-scale exemplification of theories regarding the social production of space as well (Lefebvre, 1974; Hiller, Hanson, 1984). Hillier and Hanson (1984) determined that historically, the built environment is a reflection of society: of its structure, dominant lifestyle, and culture (see previous section). Similarly, albeit at a much smaller scale and level of complexity, by being customized to correspond to the requirements and desires of its residents, the physical design of cohousing can also be regarded (to a certain extent) as reflecting the lifestyle and values of its inhabitants.

In view of the above considerations, it can be remarked that the built environment has the capacity to influence the long-term success of cohousing, by:

- supporting the main aim of cohousing— to create an enhanced sense of community; via fostering interactions, while also allowing for privacy;

- and by corresponding to the particular requirements of its residents; a measure deemed important for increasing the sense of ownership in a group (see: Lachapelle, 2008).

However, despite having the capacity to influence the success of cohousing, academics have warned that physical design alone is not sufficient for creating a sense of community in cohousing for the long-term (Torres-Antonini, 2001; Williams, 2005b; Jarvis, 2011; Markle, 2013; Jarvis, 2015). The next section will detail this issue.
b) Limitations to the influence of the built environment on behaviour patterns

Despite the accounts regarding the role of the built environment on human behaviour, Williams warns against overestimating its influence. Basing her opinion on the framework of Clitheroe et al. (see figure 1), she concludes by saying that:

“the importance of design in influencing social interactions within a residential area should not be overestimated. There are many other factors that may also influence social interaction […], including personal factors, social factors (formal and informal) and other factors, including the time period the community has been in existence” (Williams, 2005b, p.199).

Markle presents a similar argument, warning against the confidence of New Urbanism scholars who believe that “recreating the physical characteristics of traditional villages and residential communities will eventually lead to the kind of social connectedness and supportive interaction that towns and villages historically enjoyed” (Markle, 2013, p.9). She argues that empirical studies suggest that such environmental-architectural determinism is unfounded; highlighting that intentionality and participation are more important for the success of intentional communities (ibid.).

Similar findings result from the research of cohousing and environment-behaviour scholars (Abu-Ghazzeh, 1999; Torres-Antonini, 2001; Williams, 2005b; Poley, 2007; Bouma et al, 2009; Jarvis, 2011; Farida, 2013; Jarvis, 2015), who emphasize that behaviour patterns are influenced, but not determined by physical design alone. According to Torres-Antonini, “the key notion is that rather than determining behaviours, the environment affords them” (Torres-Antonini, 2001, p.60); a view supported by Alexander and by more recent environment-behaviour studies.

For example, in a study undertaken in a residential area of a Jordanian city, Farida concludes that design has had a lesser than expected influence on the cohesiveness of the community:

“[residents] share a great number of socio-economic conditions. They were average educated and represent middle-class socio-economic levels. They are relatively a
homogeneous population. This could explain the extensive networks of interactions in the neighbourhood” (Farida, 2013, p.466).

Even though in that specific case the reduced quality of outdoor spaces might have played a part in the results (Farida, 2013); other scholars are also of the opinion that despite design influencing behaviour and events,

“this does not mean that space creates events, or that it causes them. What happens is much more complex” (Alexander, 1979, p.72); because “the total pattern, space and events together, is an element of people’s culture” (ibid., p.92).

According to Abu-Ghazzeh, some scholars (e.g. Gans, 1967; Keller, 1968) consider that regardless of how interactions can be fostered through physical design and spatial proximity, “people prefer to associate with like-minded others, and no amount of physical closeness will overcome this social distance” (Abu-Ghazzeh, 1999, p.43). This reasoning has been shown to be valid in the case of cohousing as well. For example, Torres-Antonini’s research reveals
that physical design affects the success of cohousing; by providing ‘substantial affordances’ for social interaction (Torres-Antonini, 2001). Her respondents

“are embracing the idea that that the physical shape of their community is a major factor for achieving a sense of community, and crediting social contact design for it” (Torres-Antonini, 2001, p.188). However, they “clearly assign a greater value to intentionality and action and in consequence do not centre their social expectations solely on the design of their built environment” (ibid.).

The author goes on to mention that “behaviours tend to occur independent of the configuration of the cohousing environment” (Torres-Antonini, 2001, p.198); being influenced by factors such as motivation, participation, and support (ibid.). As such, she concludes that “affordances for participatory action are tied to [the] existence of the cohousing itself, rather than to specific features of its built environment” (ibid., p.198). This argument is supported by Bouma and Voorbij, who state that

“even though cohousing communities have been designed according to these [social design] principles, it is not automatic that dwellers will have an active social life in such a community” (Bouma and Voorbij, 2009, in: Bouma et al., 2009, p.3).

According to Jarvis, the physical design is secondary in importance for the success of cohousing. In her view, the intentions and commitment of residents for establishing a sense of community, together with supporting practices, are more important:

“all of the shared activities, rituals and socialising associated with co-housing, including taking turns to prepare group meals, contributing to the working-groups tasked with managing the finances, maintaining common property, facilitating group meetings and hosting visitors who want to learn from the project all flow from a core sense of purpose and meaning that is contingent upon habituated practice” (Jarvis, 2015, p.99).
In view of all the theoretical considerations discussed so far in this chapter, this study acknowledges the potential important role played by the physical design for the long-term success of cohousing. However, in line with the propositions of Alexander (1977; 1979), Torres-Antonini (2001), Williams (2005b), and Jarvis (2011, 2015), it also acknowledges that other factors can be as important, or perhaps even more important than physical design for the long-term success of cohousing. This is in line with the conclusions of Poley, who notes that in cohousing,

“a number of key elements characteristic of cohousing neighbourhoods, including social contact design, community-enhancing social norms and participatory structures of governance, seem to work synergistically […].” (Poley, 2007, p.158). The success of cohousing “depends crucially on mutually supporting spatial, social and governance factors, [and] this poses a challenge to the design-determinism apparent in new urbanism approaches that attempt to revitalize a sense of community primarily through the vehicle of social-contact design” (ibid.).

Concurrent with these considerations, this study draws upon the argument that the purposeful physical design represents an ‘affordance’ (factor that can positively influence) for the success of cohousing, together with other potentially important factors mentioned by the literature, such as: interactions; motivation; or the development process. The research design of this study will reflect this approach; looking at a variety of factors that can potentially affect the long-term success of cohousing (see methodology chapter). This approach could also help address Williams’ statement regarding the potential influence of other factors, besides physical design, in cohousing:

“the extent to which each of these factors influences social interaction […] and how all the factors interact with each other requires further investigation” (Williams, 2005b, p. 200).
In view of these considerations, the discussion will proceed by looking at the potential influence of interactions and participation on the development of cohesive communities. The aim is to provide a theoretical basis for an analysis of some factors other than physical design that can potentially influence the long-term success of cohousing (e.g. development process and self-management of the community, both linked to interactions and participatory practices- see context chapter). Social capital theory deals with this topic, and will be considered in the following section.
3.2. The impact of interactions and participation on social cohesion

In view of discussing the impact of interactions and participation on the social cohesiveness of communities, thus providing a theoretical basis for analysing some factors (other than physical design) that can influence the long-term success of cohousing, this section will deal with social capital. It will discuss its characteristics; its importance vis-à-vis of the cohesiveness of communities; its critics; and findings related to its role in cohousing.

3.2.1 The link between social capital and cohesiveness of communities

Social capital has been defined as “social networks and the associated norms of reciprocity” (Putnam, 2001, p.21), that “enable people to act collectively” (Woolcook, Narayan, 2000, p.225). As such, it can be seen as the glue that allows the other forms of capital to achieve their full potential (Putnam, 1993; Wiles, 2004). At a basic level, the

“idea of social capital is that a person's family, friends, and associates constitute an important asset, one that can be called on in a crisis, enjoyed for its own sake, and leveraged for material gain” (Woolcook, Narayan, 2000, p.226).

The works of Coleman (1988), Woolcook and Narayan (2000), and especially Putnam (1993; 1995; 2001), have brought social capital to the fore of academic and policy debates (Forrest, Kearns, 2001; Torche, Velenzuela, 2011). Putnam’s research (1993, 1995, 2001) on the decline of social capital in the US for the past decades has been especially influential in this regard (Sobel, 2002; Poley, 2007; Markle, 2013). His extensive US survey research

“found evidence of reductions in community and organization membership, engagement in public affairs, community volunteerism, levels of trust in the government, informal sociability, and trust in neighbours and community members” (Markle, 2013, p. 25).
Supporting Putnam’s stance, Bellah et. al highlight the societal shifts and their effects on this decline in social capital:

“the physical, social and economic landscape in recent decades have shifted the nature of communities of place, tending to make them substantially less interactive and cohesive. It is common nowadays for neighbours barely to recognize one another, let alone interact in substantive ways. Cohesive neighbourhoods still exist, but their numbers are unquestionably on the decline” (Bellah et. al, 1985, in: Poley, 2007, p.29).

However, as the world enters the informational age, Forrest and Kearns (2001) warn against ‘a priori’ predictions of a society in crisis. According to them, in the past important societal shifts have led to

“assumptions that the social cement of a previous era is crumbling and that we are being collectively cast adrift in a world in which the previous rules of social interaction and social integration no longer apply” (Forrest, Kearns, 2001, p.2126).

Nonetheless, despite this warning against overreaction vis-à-vis of any societal decline, evidence from an UK survey suggests that “there are low levels of interaction, acquaintance, courtesy and everyday kindness in local settings” (ibid., p. 2132). The two authors consider that these factors can be responsible for the low evaluation of community spirit revealed by the same survey (ibid.).

This link between interactions and participation (in the community) on one hand, and social cohesion on the other, is based on the crux of social capital theory (see figure 2). It suggests that social cohesion results from the development of trust, reciprocity and bonds, all of which are significantly influenced by interactions and participation in a community (Putnam, 1993; Putnam, 2001; Durlauf, Fafchamps, 2004; Coffe, Geys, 2007; El-Attar, 2007; Poley, 2007; Torche, Velenzuela, 2011; Markle, 2013).
This implies that interactions and participation positively influence the development of trust and reciprocity between people—“the notion that if you look out for others they will look out for you” (Wiles, 2004, p.21). According to some scholars, these two factors—trust and reciprocity—contribute to the development of more socially cohesive communities, with a higher quality of life (Coleman, 1988; Putnam, 1993; Putnam, 2001; Wiles, 2004). Interactions/participation and trust/bonds/reciprocity are seen as closely linked and ‘mutually reinforcing’ (Brehm, Rahn, 1997; Putnam, 2001; Abbott, Freeth, 2008). For example, Putnam remarks that

“a society that relies on generalized reciprocity is more efficient than a distrustful society, for the same reason that money is more efficient than barter. Trust lubricates social life” (Putnam, 1993, p.3).
Coleman helps exemplify the link between trust, reciprocity and the positive externalities of social capital via the example of Asian ‘rotating-credit’ association- a common pool of money formed through the regular contributions of neighbours/friends (Coleman, 1998). Once every few months all the savings are given to a single person that contributes to the pool; so that after a period each contributing person receives one such cumulative pay-out for their personal use (ibid.). According to Coleman, such transactions are made possible by the trust that contributions will be reciprocated in the future (ibid.). Without this trust, such associations could not exist:

“for example, one could not imagine a rotating-credit association operating successfully in urban areas marked by a high degree of social disorganization- or, in other words, by a lack of social capital” (ibid., p.103).

Forrest and Kearns remark that the development of bonds between neighbours, linked to interactions and trust, positively influence the social cohesion of a community:

“issues of neighbourhood cohesion and the implications for patterns of participation, care and supervision are bound up with issues of the quality and strength of the ties between neighbours” (Forrest, Kearns, 2001, p.2132).

Furthering this point, Wiles highlights that the quality of life is higher in communities with a strong social cohesion (influenced by interactions, participation; and the resulting trust):

“levels of civic engagement – how much residents trusted others, socialised with others, and joined with others, among other measures – predicted the quality of community life and residents’ happiness far better than levels of community education or income” (ibid., p. 21).

In view of these considerations, it appears that social capital, through its main constituent elements (trust; reciprocity; bonds), can play an important, positive role for developing socially cohesive communities. Nonetheless, social capital is not without criticism, as will be detailed in the next section.
3.2.2 Criticism of social capital

The remark from the previous section are in line with the overarching view among social capital advocates: that a high level of social capital can be linked to positive results across a variety of disciplines, such as economic development, civic engagement, financial growth or health of individuals (El-Attar, 2007). However; such positive assumptions have been contested as well.

Criticism is mostly related to:

- the shortcomings of the analysis used for supporting some of the claims regarding the positive externalities of social capital (Portes, 2000; DeFilippis, 2001; Perkins, 2002; Sobel, 2002; Abbott, Freeth, 2008; Haynes, 2009; Torche, Velenzuela, 2011);

- the potential negative externalities of social capital (Durlauf, 1999; Portes, 2000; El-Attar, 2007). For example, Durlauf mentions “the potential for group-based identification to lead to intergroup hostility” (Durlauf, 1999, p.2);


For example, when discussing the health of individuals, Abbott and Freeth remark that

“the literature on social capital currently offers little evidence or theoretical justification for believing that these core components [trust and reciprocity] contribute to the beneficial effects of social capital on health” (Abbott, Freeth, 2008, p.880).

Durlauf also argues for caution; mentioning that usually positive findings

“are a result of social capital analyses focus on intragroup relationships” (Durlauf, 1999, p. 4). In his view, “an equally important question is intergroup relations. Many of my concerns about social capital stem from the belief that although social capital
might facilitate intragroup coordination, by enhancing group identity it promotes intergroup hostility” (ibid.)

A similar critical stance is taken by DeFilippis’ (2001), who is criticizing Putnam’s interpretation of social capital. The critic suggests that “Putnam’s framework is fundamentally [...] flawed” (DeFilippis, 2001, p.800). DeFilippis bases his statement on Putnam’s disregard of issues related to conflict and power; as the latter does not consider that individual and group benefits/interests might not be synonymous (ibid.). As a positive example that takes such issues into account, he mentions social constructions that

“allow individuals to realise capital, while simultaneously allowing those network to realise the power needed to attract and control that capital (for the benefit of those in the networks)” (DeFilippis, 2001, p.799).

In his view, these constructions represent a ‘win-win’ situation because individual benefits and those of the group are both taken into consideration (ibid.). In such cases, social capital is bound to produce positive results (ibid.).

In light of considerations such as the ones above, criticism towards the effectiveness and/or interpretation of social capital theory must be acknowledged. It is beyond the scope of this study be part of this complex, on-going debate; however, it can be noticed that criticism towards social capital is mostly related to issues that do not affect the area of interest of this Thesis (e.g. criticism on: the effectiveness of social capital in generating long-term economic growth; potential intergroup hostility generated by an enhanced group identity etc.).

For example, Durlauf’s (1999) criticism is aimed at potential negative externalities between different groups (intergroup hostility); whereas the focus of this study is on the cohesiveness and continuity within cohousing communities. This corresponds to his ‘intragroup considerations’ (Durlauf, 1999); and as such his criticism is not directly applicable when discussing the role of social capital within cohousing groups.
Similarly, DeFilippis’ (2001) criticism of social capital seems to not be applicable in case of cohousing. This is because of the resemblance of cohousing with DeFilippis’ types of social constructions; where, according to the author, social capital is bound to have a positive impact (as individual and group benefits/interests are both taken into account). This can be related to cohousing, and its constant striving for balancing personal and group interests in view of the long-term success of communities (Sullivan-Catlin, 1998).

For example, cohousing residents who own their housing units are usually free to realise investments that increases the value of their property (e.g. using better interior finishing materials; installing sustainable systems etc.); as long as they do not negatively affect the communal spaces or the ethos of the community. In accordance with the argument of DeFilippis, such investments are for the individual’s own benefit, because they increase the value of their property.

At the same time, cohousing communities can impose some conditions for the selling properties, usually demanding that bids from within the community (or from the ‘waiting list’ with people interested to live in a cohousing environment) should be accepted first. In accordance with the argument of DeFilippis, this measure is in the benefit of the community; designed to safeguard it in case of new arrivals that might be less interested in the social aspect of cohousing. Consequently, cohousing can be seen as an exemplification of DeFilippis’ ‘win-win’ social constructs; and it is such cases that made the critic admit that he is “not arguing here that social capital does not matter in community development” at all (ibid., p.800).

Therefore, it can be noted (with caution, given the on-going debates) that such criticism towards social capital in general is not necessarily applicable when discussing its application for the specific case of cohesiveness within cohousing communities. This argument is further supported by the evidence available from the few studies that tackled the role of social capital in cohousing.
### 3.2.3 Social capital and the case of cohousing

The PhD research of Poley (2007) sought to measure the constituent elements of social capital in cohousing. In terms of interactions, she reports significantly higher levels in cohousing compared to mainstream settings:

“the overwhelming majority of focus group respondents in all three cases [US cohousing communities] indicated increased social and conversational engagement with others after moving into cohousing” (Poley, 2007, p.108).

In terms of trust, she reports higher levels between neighbours in cohousing compared to mainstream settings:

“In each case, a large majority of respondents indicated somewhat or much more trust towards neighbours than they felt before moving into their present neighbourhood” (Poley, 2007, p.118).

In terms of reciprocity, the results are positive as well:

“results across all three cases reflected dramatic increases in residents’ perceived practice of reciprocity. Participants, on average, reported being significantly more likely to lend and seek help from neighbours in both large and small matters. They were also more likely to lend, share and exchange goods and services with neighbours than before moving into cohousing” (ibid., p.123).

The author mentions the democratic decision-making process, the self-management of the community by the cohousing group, the development of informal support networks, the possibility of bulk buying and the enhanced possibilities for self-development, as motives underpinning these positive results (Poley, 2007). She concludes that
“Residents, regardless of personality, predisposition or life circumstance, reported experiencing significant increases in their sense of social cohesion and connectedness upon moving into cohousing. These reported beliefs provide support for the claim that cohousing encourages development of social bonds among neighbours” (Poley, 2007, p.110).

These considerations can be linked to the higher interactions and higher requirements for participation in cohousing, compared to mainstream environments. The subsequent development of trust, reciprocity and perhaps even bonds between neighbours, have a positive influence on social cohesion in cohousing. As such, it can be stated that Poley’s results are concurrent with social capital theory (see figure 2).

In view of all the considerations discussed in this section, it can be argued that social capital theory represents a useful background and foundation for a study aimed at determining factors (in addition to physical design) that influence the cohesiveness and continuity of cohousing. Social capital theory highlights how higher levels of interaction and engagement can lead to the development of trust, reciprocity, and bonds between neighbours; all constituent elements of socially cohesive communities. This statement also takes into account:

- that major criticism towards social capital theory is focused (so far) on issues that are not related to cohesiveness within cohousing communities;

- and that the findings (so far) from the little research available on social capital in cohousing are concurrent with social capital discourse.
3.3. Conclusions of the chapter

Figure 3: Theoretical underpinning of the study. Source: Author, 2016.
The aim of this chapter has been to discuss the theoretical basis for this research study. In view of its main aim (determining factors that influence the long-term success of cohousing), two key theoretical considerations will be used as the foundation for this Thesis:

- that the physical design has the capacity to influence the success of cohousing; however that it cannot determine it by itself. This consideration draws upon the social space theories of Lefebvre (1974) and Hillier and Hanson (1984), the pattern language theory of Alexander (1977; 1979), and the findings from environment-behaviour and cohousing studies on the topic;

- and that the higher level of interactions and engagement (compared to mainstream settings) can positively influence the cohesiveness and continuity of cohousing communities, by contributing to the development of trust, reciprocity, and bonds among residents. This consideration draws upon the social capital theory propagated by Putnam (1993; 1995; 2001), while also considering: the criticism directed at it; and the findings from empirical studies on the topic. In view of social capital theory, factors related to the levels of participation and interaction in cohousing (motivation, development process, participatory practices and self-management), are also bound to influence its long-term success.
4) Methodological approach and methods

The aim of this chapter is to discuss the methodological approach and research design of the study. For the purpose of the discussion, this chapter is divided into five main sections, examining: the methodological approach; the rationale for research design; the data collection process; the data analysis process; and ethical considerations of this study.

4.1 Methodological approach

a) Preliminary research as a basis for the research design

Besides the literature review and prior to determining the research design for the study, it seemed appropriate to undertake some preliminary, informal fieldwork in order to have a ‘first-hand’ experience on cohousing and the issues surrounding it. Furthermore, the preliminary stage could reveal the practical possibilities of researching cohousing communities.

This phase was considered to be preliminary to the actual, formal research; and it comprised of:

- participating in an international conference on community living; and in a meeting of the (at the time) newly established UK Cohousing Network;

- visits to two alternative housing communities: one intentional and well-established (Findhorn, Scotland); and one a relatively new, mixed tenure co-housing community (Threshold, England);

- discussions with two UK-based academics, well-known in cohousing circles;

- taking part in various meetings, events, and field-inspections of the Bron Afon organisation. Additionally, field reports on the Torfaen housing stock were generated; and workshops related to cohousing were conducted with Bron Afon tenants. The aim of this work with Bron Afon was to make an initial assessment of the applicability of the cohousing concept in their context. The purpose of this study meant that such work was only tentative; and therefore will not form part of this written dissertation.
The preliminary phase was important in the subsequent design of the research; as together with the early literature review it helped reveal the complexities of cohousing communities, and the 'broad aspects' that need to be investigated in order to get an understanding of their functioning (figure 4). Existing research considers a number of key areas as very important for the long-term success of cohousing:

- physical design; most notable design measures aimed at enhancing interactions among residents- pedestrian pathways; visibility of common house; size of individual homes etc. (e.g. Fromm, 2000; Torres-Antonini 2001; Williams, 2005b);

- environmental sustainability, an important factor affecting: the potential to receive support from developers/authorities; and the daily expenditures and well-being of residents (e.g. Meltzer, 2000; Meltzer, 2005; Williams, 2008; Lietaert, 2010);

- participatory processes and practices (communal dinners and other shared activities; subgroups created for managing different areas of the community; decision-making systems); considered as the most important factors for establishing a sense of community (e.g. Torres-Antonini, 2001; Jarvis, 2011; Poley, 2013);

- development phase; aimed at: forming a cohesive group even before moving in; and deciding about the important aspects of the future community- values/ideology, design, facilities and activities etc. (e.g. Williams, 2005a; Wiliams, 2008; Sargisson, 2012);

- motivation of residents for participating and remaining in cohousing; which needs to be fulfilled (to a certain degree) in order to have cohesion and durability (e.g. Jeske, 1992; Sullivan-Catlin, 1998; Choi, 2004).

An in-depth analysis of existing cohousing research and how it informed this study will be undertaken in the next chapter of this Thesis (critical review of cohousing research). In addition to these broad aspects resulting from the literature review, the discussion with the two aforementioned cohousing scholars revealed two more aspects that need to be taken into account when attempting to determine factors that affect the long-term success of cohousing. These are: the background of interviewees; and the wider potential/limitations of the cohousing model.
By corroborating all these considerations, a list of 12 categories with broad aspects related to cohousing emerged (figure 4). They would have to be investigated in-depth in order to have an overview of factors that can influence the long-term success of cohousing communities.

These categories form the basis for the interview guide- the main data collection method of this study (see annex II and section 4.3 of this Thesis). In view of the main aim of this study, they can be further classified in five ‘grand’ categories of factors affecting the long-term success of cohousing: motivation; development process; physical design, environmental sustainability; and interactions.

![Figure 4: Model depicting the broad aspects related to cohousing that need to be tackled in order to have a comprehensive overview on the researched communities. These aspects can be further divided into five 'grand' categories: Motivation; Development Process; Physical Design; Interactions; Environmental Sustainability. Source: Author, 2013.](image-url)
b) Philosophical perspective

The philosophical perspective underpinning this research study is drawn upon the pragmatic approach of Morgan (2007). This choice has been motivated by two reasons:

- that a pragmatic approach is characterized by a flexible perspective in regards to ontology, epistemology and methodology; chosen to best deal with the research problem and research goals at hand (Morgan, 2007; Saunders et al., 2009);

- and that if offers possibilities for combining inductive and deductive techniques in a research study (Morgan, 2007).

These two considerations will be discussed in this section.

The relevance of a pragmatic approach for a research study

According to Saunders, there are four major research philosophies- positivism, realism, interpretivism and pragmatism- each having a different ontology (view of reality); epistemology (view on what represents acceptable knowledge in research); and axiology (view on what represents values in research) (Saunders et al., 2009). The linkage between ontology, epistemology and methodology has been called ‘metaphysical paradigm’ by Morgan (2007). In his view, the main drawback of the metaphysical paradigm, regardless of the major research philosophy it is based on, is represented by the disconnection between “belief system [...and] practical decisions about the actual conduct of research” (Morgan, 2007, p.64). He mentions that

“almost all the proponents of the metaphysical paradigm insisted [...] that the research question should determine the choice of the research method” (Morgan, 2007, p.64); and as such an anomaly arises “about the linkage between philosophical commitments at the so-called paradigm level and practical procedures at the level of data collection and analysis” (ibid.).
In addition, he notes other anomalies as well: that there is a permeability of boundaries between research philosophies; and that the incommensurability between them “fails at every level except for debates about the nature of reality and truth” (Morgan, 2007). In order to combat these anomalies, he proposes a ‘pragmatist approach’ to research that rejects

“the top-down approach that characterized the metaphysical paradigm [that] had a strong tendency not only to privilege epistemology over methods but also to emphasize ontological issues above all others” (Morgan, 2007, p.68)

In contrast, his pragmatic approach is devised to give “equal attention to both the epistemological and technical ‘warrants’ that influence how we conduct our research” (ibid.). Concurrent with this approach, he suggests a shift in focus towards

“those choices [that] inevitably involve aspects of our personal history, social background, and cultural assumptions” (Morgan, 2007, p.69). This is because “these aspects of our worldviews are at least as important as our beliefs about metaphysical issues, and a pragmatic approach would redirect our attention to investigating the factors that have the most impact on what we choose to study and how we choose to do so” (ibid., p.70).

Concurrent with Morgan’s approach, the researcher acknowledges that a pragmatist approach, combining elements of positivism and interpretivism, has guided this study:

- he asserts that there is a ‘measurable’ external world independent of individuals;

- while at the same time taking into consideration that each person can have a subjective experience of that world; and that the different background, ‘inner structure’, and cultural upbringing of researchers can lead to different interpretations of the same phenomena.
For example, when aiming to determine the factors that affect the long-term success of cohousing, both approaches can be combined: using purely numerical data for determining environmental sustainability, or for a comparative spatial analysis of different sites (reality external of social actors); and acknowledging that the interpretation of the personal accounts of interviewees will be influenced by the researcher (subjective, constructed reality).

According to Morgan, combining these elements from different research philosophies is in line with his pragmatic approach to knowledge (Morgan, 2007). Furthermore, in view of Morgan’s approach, the factors that can influence the research design and interpretation of data in a study (e.g. bias) are to be considered (ibid.). To this end, three important remarks regarding the bias of the researcher must be acknowledged:

- first, the author recognizes his bias against communal living and communal arrangements, due to his upbringing - he grew up in country from the former communist bloc (Romania). Forced collectivization during the communist period has led to a strong individualistic ideology in former communist countries; and non-temporary shared living arrangements are generally seen in a negative light. This has been confirmed by the findings from a research dealing with the potential for developing cohousing in another former communist country (Bestakova, 2011). In order to try and combat this bias, the author had to get acquainted with the mentality on communal living in North-Western Europe, and the UK especially. Measures aimed at contributing to this were: taking part in conferences about intentional communities (Findhorn, 2013; Cardiff, 2015; Cardiff, 2016); informal discussions with North-West European people (residents of cohousing or other communal arrangements); and living for a couple of days in a UK cohousing community;

- second, the author recognizes his bias due to preconceived ideas regarding life in intentional communities. The author had no knowledge about cohousing prior to this study; and as such was influenced by the 'Hippy communes' preconception of secular intentional communities. Like many others not knowledgeable on the topic, the author associated all forms of intentional communal living with the excesses from the Hippy communes from the 1960s and 70s. Studying cohousing in-depth and having contact
with many residents from different communities, in different countries, helped alleviate this bias. Furthermore, investigating the differences and similarities between the various types of intentional communities (see ‘context for cohousing’ chapter) helped in this regard as well;

- and third, the background of the author in architectural studies contributed to his bias in terms of the influence played by the built environment on the behaviour of people. This could lead to attributing a more important role for the physical design in detriment to other major aspects of cohousing when conducting this study. A thorough overview of the main categories of factors related to the long-term success of cohousing, as well as a balanced approach to the data collection process (see annex II), were attempted for lessening this bias.

**Combining inductive and deductive approaches in a research study**

The literature mentions two techniques about theory generation from data in research studies: either at the beginning of the study, in which case the analysis is focused on testing the validity of the respective theory (Barbour, 2008; Simons, 2009; Graziano, Raulin, 2013). This approach is used mainly in quantitative studies, and has the advantage of giving a specific focus to the research process (Simons, 2009).

Or, as is common in qualitative studies, theories are generated from the gathered data (Morgan, 2007; Barbour, 2008; Simons, 2009). This approach has *"the advantage of being grounded in the 'lived' experience of participants in the case, leading to a unique understanding of potential theory of the case"* (Simons, 2009, p.33). Such an inductive approach has been called 'grounded theory' by scholars, a term coined by Barney Glaser and Anselm Strauss in 1967 (Catlin-Sullivan, 1998; Babbie, 2007).

Strauss and Glaser's grounded theory approach has been criticized as an 'epistemological fairytale' on the grounds that it cannot practically fulfil its hallmark of *"letting new theory
emerge from data without theoretical preconceptions" (Wacquant, 2002, in: Timmermans, Tavory, 2012, p.168). Vaughn explains the rationale behind this point of view:

"even when we believe ourselves to be unfettered theoretically, we always begin a research project with an arsenal of preconceived theoretical notions accumulated from our own research, our reading of the work of others, personal experience, literature, and conversations that shape our perceptions and ideas in spite of ourselves" (Vaughn, 1992, in: Sullivan-Catlin, 1998, p.79).

Morgan supports this view, highlighting the impracticability of purely deductive or inductive processes:

“outside of introductory textbooks, the only time that we pretend that research can be either purely inductive or deductive is when we write up our work for publication. During the actual design, collection, and analysis of data, however, it is impossible to operate in either an exclusively theory- or data-driven fashion” (Morgan, 2007, p.70-71).

Consequently, in view of his pragmatic approach to research, he proposes a version of ‘abductive reasoning’, a process “that moves back and forth between induction and deduction—first converting observations into theories and then assessing those theories through action” (Morgan, 2007, p.71).

Considering these remarks, my methodology draws on the abductive reasoning approach as proposed by Morgan, for two reasons:

- on one hand, there was a deficiency apparent at a first glance- a scarcity of primary studies on cohousing. A more in-depth literature review revealed an even greater scarcity of primary studies specifically addressing the factors that influence the long-term success of cohousing, especially in the European context (see next chapter). Given
this scarcity, a grounded theory approach aimed at determining factors that affect the long-terms success of cohousing from data gathered by this study makes most sense;

- on the other hand, a first glance at the cohousing literature (supported by the more in- depth review) also reveals that cohousing is a complex social construction (see figure 4). Aspects from different spheres come together in cohousing: design and architecture; interactions and motivation; participatory development and decision making etc. Therefore, some sort of preliminary research that provides an overview of these major aspects seems necessary in order to successfully prepare the data collection process for a study with such a broad aim. These aspects were used as guidelines for the data collection process (the main topics that needed to be tackled in order to get a comprehensive overview of the researched cohousing communities- see figure 4). This goes against the ideal view of having any prior theoretical preconceptions in grounded theory coined by Glaser and Straus. Nonetheless, it can fit with Morgan’s abductive reasoning, as long as the preconceived theoretical notions on cohousing are acknowledged when analysing the data and generating theories from it.

As a result of these two major considerations, the methodological approach for this study represents a balancing act between the need:

- for a grounded theory approach that would fit best with the aim of the Thesis and scarcity of primary literature on the topic;

- and for having some overall notions on the topic before the commencement of fieldwork research, in order not to leave some potentially important factors from different spheres outside of the research.

In practice, this meant that conducting research without any preconceived notions on cohousing would have been an undesirable proposition. A preliminary research was needed for an overview of cohousing and of the main categories of factors that could potentially play
a part in its long-term success. This resulted in broad pre-defined topics that needed to be tackled during the data collection process.

At the same time, an inductive grounded theory approach was employed in terms of data analysis (see data analysis section at the end of this chapter for more details on the process). This means that within the major pre-defined topics (determined following preliminary research), the data analysis looked for recurring patterns and factors found to have affected the long-term success of the studied cohousing communities. In this sense, theory was generated from the data, as in the grounded theory approach.

Overall, the shift between deductive and inductive processes in this study can be related to Morgan’s abductive reasoning, and his rationale for using it in research. This represents another reason for adopting his pragmatist approach to research for the purposes of this study. The discussion will proceed by tackling the research design of this study.
4.2 The rationale behind the research design of the study

a) Choosing a suitable research method- Rationale for a qualitative study

Even though it 'appeared' from the beginning that between the two, qualitative methods would be best suited for the purpose of this Thesis; it has been decided to take a closer look at the possible insights that both qualitative and quantitative methods can provide. Quantitative methods have been used in primary research on cohousing mainly for two purposes:

- **first**, for determining if residents of cohousing communities live more sustainably compared to mainstream settings (Meltzer, 2005; Williams, 2008; Sundberg, 2014). In these cases researchers collected time-based data of gas/electricity consumption, water consumption, number of automobile trips per week, average weekly costs for food procurement etc.; and compared them to 'average' mainstream norms. In such cases, quantification seems very potent and researchers came out with apparently precise data highlighting the potential of cohousing communities in terms of energy savings and environmental sustainability;

- **second**, some researchers examined the level of satisfaction in cohousing communities, by studying variables such as prior living conditions, amount of private space, existing facilities, participation in common activities, 'perceived' level of support from the community etc. (Choi, 2004). Although quantitative methods helped researchers in achieving their purposes; in both instances they felt that additional qualitative data was needed for better understanding the variations between different cases, or the processes that underpinned the results. At times, only by mixing in qualitative techniques (such as interviews or participant observations), did researchers manage explain the divergences between case-studies (e.g. the link between social cohesion and environmental sustainability in cohousing communities, in Meltzer's study).

Such examples underline the advantages and limitations in using quantitative techniques for studying cohousing. For the purpose of the current study, quantitative methods alone would not suffice, because they would simply be unable to provide significant insights on aspects such as motivation, development and daily life in cohousing communities. Without insight on
such aspects, the factors that influence the long-term success of cohousing would be difficult to determine. In other words, it is not enough just to know factual details about the functioning of cohousing communities, but only by getting to the root of issues and understanding the context and accounts of the residents can the 'mechanisms' behind factual details be understood.

This rationale is also in line with the assessments mentioned in the relevant cohousing literature, stating that

"qualitative research methods [...] are recognized as superior for exploratory studies particularly in their ability to yield highly valid data and a rich, deep understanding of a subject" (Sullivan-Catlin, 1998, p.78).

Furthermore, a qualitative approach to the study generally caters to using an inductive technique for developing new patterns and themes from the gathered data (see discussion from previous section). Such an approach also allows for flexibility in pursuing important emerging directions for the enquiry (e.g. the critical role played by local authorities especially in Sweden and Denmark in the development and continuity of cohousing communities). Therefore, given all the above considerations, qualitative methods have been chosen for realising the main aim of this PhD study, and answering the related research questions.

b) Rationale for using a cross-sectional approach for the study

If unrestricted by any constraints (such as time, finances, workload, or availability of case-examples), a complex research that includes both longitudinal and cross-sectional characteristics appears to be best suited for the aims of this study. That is because put together, one cancels the disadvantages of the other: a longitudinal study deals with observations over time, but is usually limited to a single case (or a reduced number of cases); while a cross-sectional study involves multiple similar cases, but usually studied at only one point in time.
On one hand, a case-oriented study would have been best suited if one was interested just in a specific type of cohousing. However, the aim of the current study is to research the factors that affect the long-term success of cohousing in North-Western Europe; which must take into account the various existing types and settings/context of such communities. As such, a case-oriented approach, looking at just one type of cohousing scheme, would be too limiting.

A cross-sectional study appears to be ideal; as the initial research, literature review, and discussions with cohousing academics revealed that cohousing communities are quite different from each other. They differ in terms of:

- type- intergenerational and senior cohousing;
- size;
- location- urban, rural/town;
- ownership – rented, privately owned or mixed schemes;
- layout- located in a single or multiple dwellings;
- building character- newly built or retrofit (see table 3).

That is, not to mention the cultural, social and legal differences between various countries in which cohousing communities are located.

On the other hand, a longitudinal study “is designed to permit observations of the same phenomenon over an extended period” and is considered to be “the best way to study changes over time” (Babbie, 2007, p.103). For the current study, it would have been ideal to see how cohousing communities change over time, as this can add a whole new dimension to any study on cohousing. Furthermore, it could have allowed for investigations on important issues such as changes in motivation, ideology and membership of cohousing communities. This would offer important information about the issues that might arise in cohousing over longer periods of time.

However, as the literature suggests, a study that has important cross-sectional and longitudinal dimensions usually comes at “heavy cost in both time and money” and “may
require many research workers” to be completed (ibid., p.105). Notwithstanding the duration of this study, a longitudinal approach to research was also out of the question because it is highly unlikely that cohousing residents would agree to be the subject of comprehensive research for a prolonged period of time; especially considering that such a research would represent a strong intrusion in their lives.

Nonetheless, the literature mentions a way of approximating some findings of longitudinal studies even where there are no means available to conduct such a type of study. In the case of cross-sectional studies, approximate conclusions about developments occurring over time can be achieved by the means of making “logical inferences whenever the time order of variables is clear”, or by plainly “asking people to recall the past” (ibid., p.106). Although such approaches cannot hope to substitute a real longitudinal process, they can be of use when the means for such a process are not available.

Consequently, in view of the above considerations, a cross-sectional approach appears to be most relevant for the aim of this study. However, in accordance with Babbie’s remarks of adding longitudinal characteristics to a cross-sectional study, two decisions that influenced the research design have been made:

- having among the participants people who have been living in the same cohousing community for a longer period of time, if possible even from the beginning of the development phase, thus having witnessed the start and the changes that occurred over time;

- selecting a number of ‘mature’ cohousing communities to be researched, in order to attest to potential changes over time. Since the cohousing phenomenon first emerged in Denmark and Sweden, followed closely by the Netherlands, over four decades ago (as a form of intentional community); it seemed highly appropriate to look at those countries in order to select case-examples for the study.
c) Rationale for using interviews and group interviews as the main data collection methods

The complex nature of cohousing means that there is a need for detailed insights; hence interaction with each participant is required. Furthermore, the time and resource limitations of the study, as well as the availability of cohousing communities for being researched, meant that methods such as action research or case-study research would be unviable in practice.

Other methods, such as observational fieldwork, did not seem appropriate within the available timescale for gaining sufficient in-depth insights on the whereabouts of cohousing communities. Additionally, access to the private documents of cohousing communities would have been very difficult to achieve. That is not to say that these methods could not be used to enhance a main data collection technique whenever possible; however on their own they seemed unviable given the requirements and possibilities of this study. Therefore, among the qualitative data collection methods, two seemed most appropriate: interviews and focus groups; considered to be the "two key types of generated data in qualitative research" (Ritchie J., Lewis J., 2003, p.57).

Reasoning for choosing individual and group interviews for this study:

As a stand-alone method, focus groups "only have an advantage in researching topics relating to group norms, the group meanings that underpin those norms, and the group processes whereby those meanings are constructed" (Bloor et al., 2001, p.90). Compared to interviews that "may provide commentaries [...] which are helpful in clarifying apparent contradictions"; focus groups "are likely to give rise to lively debate resulting in what may be dramatic changes of heart" (Barbour, 2008, p.133).

Some scholars even mention that "focus groups are often employed as a method of least resistance and are viewed as a poor relative of ethnography or one-to-one interviews, being employed in situations where it is not deemed possible to use these more desirable methods" (Barbour, 2008, p.132). In choosing between using focus groups and interviews for the purpose of this study, the author had to take into account several factors:
- first, given the in-depth nature of the topics to be addressed and the reduced number of participants from each community, each individual account for each topic was important. As such, a group setting would be disadvantageous (due to issues such as 'group think' or dominant individuals);

- second, the sampling method chosen to select participants from each community meant that their 'characteristics' are different (e.g. residents who participated in the development phase of the community vs. residents who moved in after the community 'matured'); which would be another reason to have individual accounts for each topic;

- third, the background of each participant bears an important link to some of the topics (e.g. motivation to live in a cohousing setting), and consequently an individual discussion would be more appropriate in this sense;

- fourth, the purpose of the discussion was not limited to researching group norms and processes, which would favour a focus group setting; but was aimed at individual accounts about a larger variety of topics (see annex II);

- fifth, although the discussion was not constructed to raise sensitive topics, it had to be taken into account that some participants might feel more comfortable in an individual setting;

- sixth, it had to be taken into account that when transcribing and analysing data, "it can be extremely difficult to tease out individual accounts in the probably somewhat disjointed and jumbled accounts that are likely to arise in focus group discussions" (Barbour, 2008, p.47).

Given all these reasons, individual interviews have been chosen as the preferred main data collection method. However, literature mentions that sometimes

"focus groups are chosen not for their inherent properties, but as a perceived shortcut to what is essentially interview data, with groups being utilised in order to save time" (Barbour, 2008, p.47). As such, "some studies opt to give respondents a choice as to whether they wish to participate in one-to-one interviews or focus groups" (ibid., p.48).
Such a need occurred during the current study as well, mainly for two reasons:

- first, cohousing residents are busy people, many of them working full-time and even commuting to another area for work. Because of this, they mentioned that they would be available only at a specific date, and at specific hours, usually in the evening. This meant that there would not be sufficient time (in the allocated period for each community) to undertake individual interviews with all three or four members of a community;

- second, some participants outside of the UK mentioned that they are unsure of their English, and would prefer a group setting in order to get some help from the other participants with translating some concepts from their mother-tongue.

In addition to these two considerations, there were no apparent sensitive issues on the agenda; and in most communities there were practically no other participants to choose from. All these led to the decision to give participants (in some instances where it was obvious that there was not enough time to conduct individual interviews with all of them) the choice between taking part in individual or group interviews. I specifically mention the term 'group interviews' and not 'focus groups', despite of the fact that the relevant literature often confuses these two terms:

"some researchers refer to group interviews, which I would see as veering towards the more structured and of the spectrum, with the researcher putting each question to each of the participants in turn, whereas focus group discussions focus on the interaction between participants, with the researcher taking a less active role in directing talk" (Barbour, 2008, p.18).

This distinction between group interviewing and focus groups is important, because the intention was not to create interactions between participants, as would be the case in focus groups (Saunders, Lewis, Thornhill, 2009); but to discuss each topic with each of them (just
as if it would have been an individual interview). This approach meant that a structured format of the group interview had to be kept, asking each participant each question (exactly how it would have been proceeded with individual interviews), so as not to miss any individual account. This approach to group interviewing eliminates some of the deficiencies of focus groups mentioned earlier (e.g. dominant individuals, overlapping voices difficult to transcribe etc.); and allows for circumventing some of the practical limitations (finances/workload) of this research.

Furthermore, it is important to mention that all interviews were undertaken in the location selected by participants; either in their private flats/houses or in one of the common rooms of the community. This allowed them to feel more relaxed, as they were in a convenient, familiar setting (Saunders, Lewis, Thornhill, 2009). Also, it allowed for taking part in the common dinners to which the researcher has been invited (in most of the studied communities).

Format of the interviews: In terms of the format of the interviews, it appeared more appropriate to formulate these topics in the form of questions (see annex II). This approach has to take into account the amount of control exercised over the responses, which would in turn determine the type of data received (Bernard, 2013).

The literature mentions that semi-structured interviewing are favoured by most qualitative researchers because they allow "for the ordering of questions to be employed flexibly to take account of the priority accorded to each topic by the interviewee" (Barbour, 2008, p.17). This avoids the situation arising in more structured formats where the researcher completely dictates the direction of the encounter (ibid.). Furthermore, semi-structured interviews are best used when "you won't get more than one chance to interview someone" (Bernard, 2013, p.183).

In line with the recommendations of the literature, a semi-structured format was chosen as the preferred method for conducting the interviews. A number of reasons led to this decision:

- the in-depth nature of the topics to be discussed, that would sometimes require additional comprehensive answers;
- the need to allow respondents to go back to a previous topic, in case they remember some information they forgot to mention;

- the need to provide some flexibility for pursuing emergent themes, especially given the variety and complexity of the factors involved in a cohousing scheme;

- the fact that I would not have the chance to interview the respective person for the second time.

Furthermore, a more structured approach would have got in the way of communicating freely with the interviewees, thus limiting the flexibility of the answers; while a less structured format could have resulted in the loss of direction for the interview.

Additional research techniques: In addition to interviews as the main data collection technique, by visiting and observing all the 16 cohousing communities personally, the researcher managed to develop a better understanding regarding their size, common facilities and some of their group norms and processes. This enhanced the information received from interviewees. Furthermore, when determining the design characteristics of each cohousing community (a major ‘theme’ emergent from the literature review and preliminary research); the researcher made use of his previous training and used GIS software for the spatial analysis of the sites.

The drawings from the physical design chapter of this Thesis have been produced using a particular GIS software (AutoCAD MAP 3D); chosen because of the familiarity of the researcher with the AutoCAD platform, due to his architectural background. Satellite imagery software such as Google Earth or BingMaps 3D was used for obtaining accurate reference images for the purposes of the visual analysis. Additionally, image processing software such as Adobe Photoshop was used for collating the various drawings.
d) Rationale for also using a short questionnaire

Prior to the interview itself, the literature mentions the advantages of handing out a short questionnaire, aimed at: immersing participants into the topic; collecting routine data about the socio-demographic characteristics of the interviewees; or even collecting more than just background information (Bloor et al., 2001; Barbour, 2008; Bernard, 2013). As such, it was decided to use a short questionnaire for two purposes:

- gathering some background information regarding the participants in the shortest and most convenient way;
- stimulating the participants to think about their cohousing experience, thus immersing them into the topic just prior to the in-depth interviews.

Such an approach allows the interview to be focused on the actual in-depth information, without the need for prolonging it by asking background information about the interviewee. All 46 participants in the study, whether they took part in individual or group interviews, have completed this short questionnaire (see annex III).
4.3 Data Collection

a) The process for reviewing the literature on cohousing

The aim of the literature review on cohousing has been:

- to get an overall picture of the topic, of the main emergent themes, and of the findings;
- and to determine potential gaps in the knowledgebase that could be tackled by this study.

The critical analysis of the literature on cohousing will be discussed in detail in the next chapter of this Thesis; this section being aimed at describing the reviewing process. Akin to a systematic literature review, the process involved: the identification of potentially relevant studies; deciding which to include and which to exclude from the analysis; identification of key themes, and developing a framework for their analysis.

Identifying relevant studies: Discussions with cohousing professionals during the preliminary phase of this study have revealed that the primary cohousing literature is quite scarce compared to other study areas. In view of this, and of the need to get an overview of the topic, it has been decided that the first stage of the review will include all studies on cohousing written in English, regardless of their particular focus or date.

The search process included:

- electronic database search (e.g. Google and Google Scholar; Cardiff Metropolitan and Radboud University electronic search engines);
- checking the reference lists of identified studies for further literature on the topic;
- suggestions from the UK and US cohousing networks, as well as from cohousing professionals during the preliminary stages of this study;
- and manual search of some academic journals in case some articles were missed by the electronic search (e.g. ‘Communal Societies’).
Search keywords included besides ‘cohousing’ (‘co-housing’), terms such as ‘intentional communities’, ‘shared living’, or ‘alternative housing’; in order to make sure that some cohousing studies were not left aside due to their title.

Results revealed about 60 primary studies focusing on cohousing, which were all read in full; plus a number of handbooks. It is also important to mention that the review process looked at cohousing research from all over the world; as most studies that have been identified focus either on North-Western Europe, or the US.

This is in part due to the scarcity of literature on cohousing in the UK; and the lack of studies looking at cohousing in Wales. Considering the number of existing communities, cohousing is still in its incipient stages in the UK (compared to Denmark, Sweden, Netherlands, or even North-America); and this is reflected in the amount of research that looks at UK case-examples. At the beginning of this study, notable work on cohousing in the UK context was undertaken by Brenton (2001), Field (2004), Williams (2005a), Scott-Hunt (2007), or Jarvis (2011). In the last few years, cohousing has started to become more popular in the UK (Jarvis, 2015); and this is also reflected in the increasing primary research on UK cohousing. The papers of Brenton (2013), Chatterton (2013), Ruiu (2015), or Scanlon and Fernandez (2015), use UK cohousing communities as their focal point.

Nonetheless, primary research on cohousing in the UK still remains scarce; and represents only a fraction of similar research undertaken in North-West Europe or the US. Table 4 (see next chapter) reveals that less than 20% of the studies are focused just on UK case-examples (5 ex 28); with only two additional studies using both UK and non-UK case-examples (7 ex 28). As such, in order to have a comprehensive overview of the body of knowledge on cohousing; the critical literature review needed to include studies from North-Western Europe and the US as well.

Criteria for selecting the studies for analysis: The main aim of this Thesis is to determine factors that influence the long-term success of cohousing. The preliminary research has shown that besides physical design; factors from the categories of interactions, motivation, development process, and environmental sustainability, have such an influence. There are
studies on cohousing that do not seek to address any of the aforementioned categories. For example, studies:

- discussing the terminology of cohousing (e.g. Vestbro, 2010);
- discussing gender issues in cohousing (e.g. Toker, 2010; Vestbro, Horelli, 2012);
- role of cohousing in redefining work (Rauscher, 2013);
- using cohousing as an ‘umbrella term’ for shared living arrangements in various national contexts (e.g. Bresson, Denèfle, 2015; Tummers, 2015; Wankiewicz, 2015).

Despite their overall importance for the field of cohousing, such studies are not directly relevant to any of the aforementioned categories, and were not part of the critical cohousing literature review. The same applies to studies looking at intentional communities other than cohousing, discussed in the introductory chapter (e.g. Rigby, 1974; Abrams et al., 1976; Rhoades, 2008; Firth, 2010); or with various theories used throughout the data analysis chapters of this Thesis (e.g. social-capital theories; expectancy theory; environment-behaviour theories). These are an integral part of the discussions in the respective chapters; used for ‘framing’ the findings from this study. Therefore, they will be addressed in the data analysis chapters. Consequently, from the total number of identified studies on cohousing, about half were used for the critical analysis.

**Framework for analysis:** In order to have an overview of the research, to compare the findings, and to determine potential gaps in the knowledgebase, the studies part of the critical review were ‘charted’ on the basis of a framework (see table 4). The framework was divided into several sections corresponding to the main categories of factors deemed to influence the long-term success of cohousing: motivation; development process; physical design; and environmental sustainability; plus some additional studies (e.g. social capital in cohousing; social support in cohousing etc.) that are important for the purpose of this Thesis, but did not ‘fit’ in any of these categories. Interactions are an important part of the other categories; and were addressed when discussing each of those, rather than as a separate section/chapter. The framework included the following headings:

- the name of the author(s) and the date of the study;
- the type of the research (qualitative; quantitative; mixed);
- Country (countries) of focus;
- research techniques used by the study (interviews, surveys, visual analysis etc.);
- sample size;
- and main findings.

This framework formed the starting point for the detailed analysis of the cohousing literature on the four aforementioned major themes. The aim of the analysis was: to discuss how the respective studies informed this Thesis; to compare their findings; and to determine any gaps in the knowledgebase.

**b) Selecting the case-examples for this study**

Once the appropriateness for a cross-sectional approach to the study had been determined, it was important to decide on the number and types of cases to be researched. This decision had to take into consideration:

- the need to examine all existing types of cohousing (as mentioned in the previous section). In other words, when selecting cases the various aspects that differentiate cohousing communities had to be taken in account: type, size, location, ownership, layout and building character;

- the financial resources available; the balance between the number of case-examples and in-depth focus; the workload which includes data gathering, transcription and analysis; and the writing up of the dissertation;

In view of the above considerations, a number of 16 case-examples have been chosen for research. Given the infancy of the cohousing phenomenon in the UK, with only a few existing communities to date (around 14 at the time of writing, with several more in various development stages), and with only a handful of these open to researchers (due to the
‘research fatigue’), it became obvious that I had to look at other countries as well in order to
develop the understanding about cohousing needed in order to achieve the purpose of this
study. The initial brief of this study suggested looking at North-Western Europe. Therefore, it
has been decided that the case-examples be chosen from 4 different countries (an average of 4
cases for each country): United Kingdom, the Netherlands, Sweden and Denmark. The
reasons for this selection are multiple:

- first, one of the deficiencies of existing English literature on cohousing is the
  predominance of non-European case-examples in almost all in-depth studies, and as
  such a study based on European examples would address that and enhance the academic
  knowledge base on cohousing;

- second, cohousing communities in Denmark, Sweden and the Netherlands exist for
  over four decades, and some of the older cohousing communities in these countries have
  reached a level of ‘maturity’ and durability not yet existent in other countries;

- third, investigation into the matter has revealed a high number of listed cohousing
  communities in these countries (about 200 in total), and thus the selection pool is much
  higher than anywhere else in Europe;

- fourth, English language is wide-spread in all these countries, as a large part of the
  population, regardless of age, is able to speak English. This represents an important
  aspect for the practical viability of the study; as otherwise more resources (using a
  translator etc.) and workload would have been required for collecting, translating and
  transcribing data;

- fifth, all countries are close to the UK; and as such travel time and especially travel
  costs could be supported by the budget;

- sixth, some of the cohousing academics I met during the initial phases of the research
  had some contacts in these countries and agreed to help me. This proved to be very
  helpful for convincing some of the communities to participate in the study.
In regards to the selection process of the specific types of cohousing communities, they have been chosen after discussions with the representatives of the cohousing network from each respective country. All communities listed in the cohousing networks' website (in each of the four countries) had been investigated, looking in particular at their type, size, location, type of ownership, layout, and building character. The goal was to select on average four communities from each country, who together would cover all above types of cohousing. This would give a reasonable degree of diversity, given available resources and time. The advice and sometimes direct assistance of the representatives of the four national cohousing networks was quite helpful for creating a shortlist with communities to be approached.

The process for contacting communities and requesting them to participate in the study usually started with sending an e-mail to all shortlisted communities in the four countries. From the positive replies, four communities that together would cover the entire (or large majority of the) palette of cohousing types described in the previous section were selected. This strategy is in line with the recommendations of relevant literature regarding case studies in qualitative research: "to reflect diversity and to provide as much potential for comparison as possible" (Barbour, 2008, p.53), without seeking to provide representative samples.

Furthermore, given the large amount of cohousing communities listed online (over 50 communities listed in each of the national cohousing networks from Sweden, Denmark and Netherlands); finding four communities that would fit the purpose and agree to participate in the study was not such a difficult task. On average, I could choose four communities from the six or seven that agreed to take part in the study; and the decision between them was based on their year of emergence and their ‘fit’ with the cross-sectional sampling (see table 3). The only difficulties in this regard were in the UK, because of the much lower number of existing communities, and of the 'research fatigue' of the newer communities. Such practical considerations meant that in the UK only three cohousing communities could be researched; however, in order to maintain the average of four communities per country, I decided to investigate an extra one in Denmark.
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Table 3: Fit of communities with cross-sectional sampling. Source: Author, 2016.

c) Selecting participants for the study

Participant selection "refers to the identification of people asked to participate in a study" (Graziano, Raulin, 2013, p.201); and it is considered to be "a form of sampling (specifically, sampling participants)" (ibid.). The most knowledgeable persons about the whereabouts of a cohousing community are usually their own residents. They are the ones living every day in this social setting; taking part (to a higher or lesser extent) in the common activities of the community. They are the ones who ultimately decide about the functioning of the community.

Whether they have been in the respective community for a very long time, even from the development phase; or they have joined along the way, their insights can be very useful for the purpose of this study. The ones living from the very beginning can give accounts about the issues encountered during the development process and about the changes occurred over time. The ones who joined relatively recent can provide information about the process of integration for new members in an already formed community.

That being said, it was estimated that on average three or four residents from each cohousing community would be a suitable number for the purposes and practical possibilities of the study. This decision took into account the number of topics raised and the level of detail required, the availability of participants (as usually cohousing residents work part-time or full-time), the financial resources and the time available to collect data.

On one hand, such a number allowed the researcher to go into detail about each topic with each participant, opening the possibility to collect data from each community in a timeframe between one to three days. This was important from a financial point of view, as research had to be conducted abroad, in the participants’ setting; and expenses with travelling, accommodation, meals etc. had to be taken into account.

On the other hand, it provides diversity regarding the type of cohousing residents participating in the study. Among the three or four people to be interviewed from each community, two types of key interviewees have been selected due to the different information they can provide (see previous page): at least one person who has been in the community for
a long time, preferably already from the development phase; and one person who moved in along the way, if possible after the community 'matured'.

The experience with the data gathering process showed that having three or four participants from each community represents a suitable number for this study. Very rarely, only in two of the 16 researched communities, did an additional person or two request to be interviewed (in two Danish communities). In the vast majority of cases, irrespective of the size of the community, only three or four people at maximum expressed interest in participating in this study. Therefore, selecting this number of participants has been both convenient and purposive: convenient, because it allowed for meaningful research in the time span of one to three days allocated to each community; and purposive, because it allowed for collecting data from key participants fitting a particular profile (in regards to the length of their involvement in the community).

In terms of the actual recruiting process, the researcher has first contacted the person responsible with outside relations in each shortlisted community. After initial contacts, once they agreed to take part in the study, they were asked to further recommend residents of their community that might be interested and would 'fit' the target ('snowball sampling'). As mentioned, it was requested for:

- at least one person who has been in the community for a long time;
- one who has moved in 'along the way';
- and, if possible in intergenerational cohousing types, one person living with children at home (these characteristics were linked to some of the topics of my framework).

Taking into account the character of the study, the resources involved, and especially the availability of participants which considerably limited any options for a 'representative' sampling; using this 'snowball' technique seems to have been a valid choice for the purpose of this study.
d) Recording and transcribing

Given the richness of detail from each interview, it was inconceivable to proceed without the possibility to record the data; and luckily, no participants had any objections to it. The literature also mentions some downsides of recording interviews as well, such as: "thinking that you can always return to the recording later" and as such "not paying enough attention to the issues at the time" (ibid.); or the possible failure of equipment. The former issue was minimized by the character of the interviews and of the debated topics, which required: constant attention from the part of the researcher for potentially important emergent topics; and the ability to shift the line of conversation in case the participant's account is heavily ‘off-topic’. The latter downside was dealt with by using a back-up recording device (in this case, a 'smartphone') in addition to the main voice recorder.

Another important aspect regarding the audio recording of interviews is the amount of time needed to transcribe and code the interviews, especially given the open-ended character of qualitative interviews (Bloor et al., 2001; Simons, 2009; Clough, Nutbrown, 2012; Bernard, 2013; Silverman, 2013). This issue was dealt with by using voice recognition software for the transcription of interviews, which reduces the amount of time required to transcribe each interview; and by allocating sufficient time for transcribing and coding data.
4.4 Data Analysis

The literature considers the systematic coding of collected data an important factor when using the grounded theory approach (Babbie, 2007; Barbour, 2008; Bernard, 2013). It involves "taking text data or pictures gathered during data collection, segmenting sentences (or paragraphs) or images into categories, and labelling those categories with a term" (Creswell, 2009, p.186). This is especially important given the open-ended character of questions in qualitative research. Coding is an important part of the data analysis process, as it breaks down data "into segments or data sets" (Simons, 2009, p.117); which "can then be categorised, ordered and examined for connections, patterns and propositions that seek to explain the data" (ibid.).

The framework that was developed for researching existent cohousing communities (in view of the purpose of this study) also had this aspect of coding in mind, especially considering the open-ended character of the participants' responses, which further complicates matters. As such, all information gathered during the interviews was part of some pre-specified topics (around 30 in total), which themselves were then part of a larger category (12 in total, each depicting a major aspect of life in cohousing communities- see figure 4). This structuring of the format that guided the interviews helped in initially categorizing the data based on broad topics.

Following that, the data analysis process involves finding patterns and relationships for each topic separately; with the aim of determining key factors that influence the long-term success of cohousing. This fits with the grounded theory approach of deriving theories from data, and not 'a priori'; although (as discussed earlier in this chapter) conducting a research without any preconceived notions on the topic is almost a practical impossibility (due to influences from the literature; from the preliminary research, if any; or from the author's bias). Preconceived notions for this study can be considered the aforementioned 12 larger categories of topics related to cohousing (see figure 4); pre-defined topics that were tackled during all the interviews. These broad topics can be further categorized in five 'grand' themes (see below). As such, preconceived notions (pre-defined topics to be discussed) were needed in order to have an overview of the complex social construction that is cohousing, and not to miss out on any potential important influencing factors (see methodological approach section).
However, as described above, within these broad topics, theory was generated from recurring patterns and relationships drawn from the available data. This follows an inductive approach related to grounded theory. Such recurring patterns of factors that can affect the long-term success of cohousing belonged to each of the 'grand' themes determined as a result of the preliminary research:

- Motivation of residents;
- Development process;
- Physical Design;
- Interactions;
- Environmental sustainability.

All the main findings were drawn from the data; and the researcher tried to make sure that they are not otherwise influenced by the information on cohousing gained 'a priori' of the data collection process. Mentioning the frequency of some main findings relative to the total amount of gathered data represents a way of highlighting this; although it is not the only criterion for the key points from this Thesis (due to not being a hallmark of qualitative studies). As a result of this approach, there are some differences between the findings from this study and previous research on cohousing. These will be addressed in the concluding chapter of this Thesis.

![Figure 5: Graphic representation of the constituent elements of a cohesive NWE cohousing project (the 'triangle model'). Source: Author, 2015.](image-url)
4.5 Ethical considerations

In order to conform to the characteristics of an ethical research (see: Clough, Nutbrown, 2012; Graziano, Raulin, 2013), a number of documents have been prepared, handed out to participants before the interviews, and acted upon during the data collection and analysis phases:

- A participant information sheet (see appendix III), detailing the following aspects of the interview process: the background of the research; the rationale for choosing participants for the interviews; the consent of participants regarding the audio recording of the interview and the use of anonymised quotes in the Thesis or in academic publications; the voluntary participation to the interview and the possibility of participants to withdraw at any given time, without stating a reason; the fact that responses will not be individually identifiable; the safe storage of all information and forms collected as a result of the interview in a locked filing cabinet (with key) within the Cardiff Metropolitan University; the rights of the participants to know about all personal data stored about them and about the people who are permitted to view this information; and the fact that they are entitled to a copy of the recording itself and of the transcript of the interview;

- A consent form, that requires participants to confirm that: they chose to take part in the interview voluntarily; they understand the information sheet and the interview process; they understood that they have the possibility of withdrawing at any time during the interview without specifying a reason; and they agree (if it is the case) to the audio recording of the interview and to the use of anonymised quotes in the Thesis or in academic publications;

- A paper disseminating to participants the questions that will be asked during the interview.

Given the stipulations of the preceding documents and the fact that the study is dealing with topics that are not inherently sensitive, the Ethics panel of the University approved the application (see annex IV). There were no 'ethical-related' objections whatsoever from the participants during the interview process.
5) Critical review of cohousing research

As detailed in the methodology chapter, preliminary research for this study has identified five major categories that influence the long-term success of cohousing: motivation, development process, physical design, interactions, and environmental sustainability. The aim of this chapter is to critically review the literature on cohousing, focusing on these categories (‘interactions’ are an important part of the other four categories; and will be addressed as part of each of them, rather than as a separate section/category). The critical review implies examining:

- how the cohousing literature informs this study;
- the main findings and potential limitations of identified cohousing studies;
- and how the gaps in the body of knowledge shape the research questions that underpin the aim of this study.

In order to achieve these aims, the chapter is divided into three main sections. The first one represents a systematic overview of the main primary research on cohousing, in form of a table. The second main section investigates how the existing body of knowledge on cohousing shapes this study, detailing for each of the four ‘grand’ categories (motivation; development process; physical design; and environmental sustainability): the influence of existing research on this study, as well as their limitations; the gaps in the knowledgebase; and how this study can help address these gaps. The final main section will present the conclusions of this chapter.
5.1 Review of main studies on cohousing

This section represents a systematic overview of the main studies on cohousing that informed this Thesis. It will highlight: their focus; their research design; their sample size; and their main findings (table 1). This review will form the basis for the next section of this chapter, which will investigate how existing literature has shaped this study. However, prior to this, it is important to make some considerations regarding the role of various handbooks focused on the practical experience of cohousing.

a) The practical experience of cohousing

Interviewees, cohousing scholars, and the academic literature (e.g. Torres-Antonini, 2001; Meltzer, 2005; Bestakova, 2011; Poley, 2013), have highlighted the relevance of handbooks aimed at guiding interested parties during the development stages of cohousing, and beyond. These books are not part of the critical literature review as they do not represent academic research per se; however this does not mean that their contribution is not important.

Several interviewees have referred to McCammant and Durrett’s ‘Cohousing: A Contemporary Approach to Housing Ourselves’ (originally published in 1988; second edition from 1994) as ‘The Book’, highlighting its positive influence during the development phase of their communities. The experience of the two authors stems from: visiting Danish cohousing communities during the 80s; and assisting the development of various cohousing projects in North America for the past two decades. Their work provides an overview of the cohousing culture, and of its evolution in Denmark; and is focused on ‘good practices’ aimed at guiding groups through all stages of the development phase (forming a group; group processes; physical design; marketing; acquiring land; the construction process etc.). A revised and updated version of ‘the Book’ has been published in 2011 (McCammant, Durrett, 2011). Another work focused on guiding the development of cohousing communities for seniors has been published by the same authors in 2009 (McCammant, Durrett, 2009).

A handbook with similar aims and structure (providing guidelines from the first meeting of the participatory development process up until the end of the construction phase) was written by Chris and Kelly Scotthanson, and is based on the practical experience of the authors in developing North-American cohousing communities (Scotthanson C., Scotthanson K., 1996).
In terms of European handbooks, Martin Field looked at the possibilities of developing cohousing in the UK; providing rich details in regards to the characteristics of cohousing, and to the specific tasks required by the participatory development process (Field, 2004). In addition to that, he undertook an analysis regarding the differences and similarities between cohousing and other types of intentional communities/communal arrangements (ibid.). This analysis was further developed by the same author in a more recent book looking at the characteristics of developing cohousing in Britain (by comparing how cohousing communities are situated in relation to ‘Community Land Trusts’; see: Bunker et al., 2011). Annex V provides a short report regarding the role of cohousing in the bigger frame of intentional communities as well (by highlighting its similarities and differences to the generic other types of intentional communities).

Also in the UK, Paul Chatterton wrote about the lessons learned from the development of a cohousing project with a strong environmental character: LILAC (Chatterton, 2014). In Germany, the ‘Berlin’ Urban Institute and the ‘Wohnbund’ Housing Network released two handbooks (written in both English and German) that also incorporate lessons gained during the development of cohousing projects throughout Europe (Institute for Creative Sustainability, 2012; Wohnbund E.V., 2015; see also: Field, 2015).

All these handbooks represent an important contribution to the field of cohousing. Despite of their practical relevance, since they are not based on research per se, they will not be part of the critical analysis from the remainder of this chapter.

b) The primary research on cohousing

The following table represents an overview of the main research on cohousing identified by this study. The criteria for selecting particular studies have been discussed in the methodology chapter of this Thesis. Some studies from the table, due to their focus, can be categorised in more than one theme (e.g. Williams, 2005a; Williams, 2008; who inform this Thesis both in terms of the development process of cohousing, as well as in terms of its environmental sustainability).
## a) Motivation for participating in cohousing

<table>
<thead>
<tr>
<th>Author</th>
<th>Research Type</th>
<th>Case Studies</th>
<th>Research Techniques</th>
<th>Sample size</th>
<th>Main Findings</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td>Motives for participation</td>
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<td>Social: Sense of community; self-development</td>
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<td>1. Jeske (1992)</td>
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<td>Interv. Survey P.O.</td>
<td>Interv.-13</td>
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<td>5. Choi (2013)</td>
<td></td>
<td>SWE:12 (same as above)</td>
<td>Surveys-242 P.O.-11</td>
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### b) Development Process of cohousing

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<thead>
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<th>Research Type</th>
<th>Case Studies</th>
<th>Research Techniques</th>
<th>Sample size</th>
<th>Main Findings</th>
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<td></td>
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<td>Quanti</td>
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<td>Considerations on the PDP</td>
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<td>Interv. Focus Groups P.O.</td>
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<td>*(some findings from Jarvis, 2011 and Jarvis, 2015 can be included here)</td>
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<td></td>
<td>Advantages: United Group; Influence of group on physical design</td>
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<td>Challenges: High uncertainty; High turnover; Financial Risks</td>
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<td>Partnership Model: Lower costs; Lower Risks; Reduced timescales</td>
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<td></td>
<td>Taxonomy for developing cohousing (Models of development: resident-led; partnership; top-down)</td>
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<td>Potential for developing cohousing in US and UK</td>
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<td>Legal needs for emerging groups</td>
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<td>*(can include here Fenster, 1998)</td>
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<td>6. Williams (2005a)</td>
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<td>x</td>
<td>x</td>
<td>x</td>
<td>US:? UK:4</td>
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<td>x                              x                                     x x x</td>
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<td>7. Scott-Hunt (2007)</td>
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<td>UK:2</td>
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<td>x                              x                                     x x x</td>
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<tr>
<td>8. Williams (2008)</td>
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<td>x</td>
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<td>US:4</td>
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<td>x                              x                                     x x x</td>
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<td>9. Ruiu (2015)</td>
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<td>UK:1</td>
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<td>x                              x                                     x x x</td>
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<tr>
<td>10. Scanlon, Fernandez (2015)</td>
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<td>UK:1</td>
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<td>x                              x                                     x x x</td>
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### Physical Design of cohousing

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<th>Main Findings</th>
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<th>Measures related to single-building cohousing</th>
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<tr>
<td></td>
<td>Quali</td>
<td>Quanti</td>
<td>Mix NA EU Interv</td>
<td>Visual Analysis P.O. Case Studies Research Techniques</td>
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<td>Fostering social interaction or sense of security Enhancing outdoor privacy</td>
<td>Corralling the cars at the edge of the site + use of Pedestrian Pathways Location and Visibility of the Common House Reduced Size of Private Homes Possibility for surveillance Existence of buffer zones (e.g. front yards; back yard) Entrance spaces/transition areas/location of flats</td>
</tr>
<tr>
<td>11. Marcus (2000)</td>
<td></td>
<td></td>
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<td></td>
<td>x x x x x NL:3 DK:2 SWE:1 Interv: 5-8 residents from each case-study</td>
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<td>12. Fromm (2000)</td>
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<td>x x x x x US+CA: 24</td>
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<td>13. Palm-Linden (2000)</td>
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<td>x x x x x SWE:10</td>
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<tr>
<td>14. Torres-Antonini (2001)</td>
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<td>x x x x x US:1 Interv- 17</td>
<td>x</td>
<td>x</td>
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<tr>
<td>15. Williams (2005b)</td>
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<td>x x x x x US:2</td>
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<td>x</td>
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### d) Environmental Sustainability of Cohousing

<table>
<thead>
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<th>Research Techniques</th>
<th>Sample size</th>
<th>Main Findings</th>
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<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td><strong>Numerical data showing that cohousing is more env. sustainable than mainstream</strong> <em>(can include here Williams, 2005a)</em></td>
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<tr>
<td></td>
<td>Quali</td>
<td>Quanti</td>
<td>Mix</td>
<td>NA</td>
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<td>16. Meltzer (2000)</td>
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<td>x</td>
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<td>17. Meltzer (2005)</td>
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<td>x</td>
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<td>x</td>
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</tr>
<tr>
<td>18. Lietaert (2010)</td>
<td>x</td>
<td></td>
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<td>x</td>
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<tr>
<td>19. Stratmann, Ferreiro, Naray (2013)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
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<tr>
<td>20. Sundberg (2014)</td>
<td>x</td>
<td>x</td>
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</tr>
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</table>
### e) Other important uncategorized works cited in this Thesis

<table>
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<th>Author</th>
<th>Research Type</th>
<th>Case Studies</th>
<th>Research Techniques</th>
<th>Sample size</th>
<th>Main Findings</th>
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<tbody>
<tr>
<td></td>
<td>Quali</td>
<td>Quanti</td>
<td>Mix</td>
<td>NA</td>
<td>EU</td>
</tr>
<tr>
<td>22. Poley (2007)</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>23. Bouma, Poelmann, Voorbij (2009)</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>24. Jarvis (2011)</td>
<td>x</td>
<td>x</td>
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<td></td>
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<tr>
<td>25. Sargisson (2012)</td>
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<tr>
<td>Author</td>
<td>Research Type</td>
<td>Case Studies</td>
<td>Research Techniques</td>
<td>Sample size</td>
<td>Main Findings</td>
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<td>-------------------------------------------------------------------------------</td>
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<tr>
<td>Brenton (2013)</td>
<td>Quali</td>
<td>Mix</td>
<td>NA</td>
<td>UK:2</td>
<td>Factors that affect the amount of sharing in cohousing</td>
</tr>
<tr>
<td>Jarvis (2015)</td>
<td>Quanti</td>
<td>Survey</td>
<td>Focus Groups</td>
<td>AUS:7</td>
<td>Comparison of cohousing development in NL and the UK</td>
</tr>
<tr>
<td></td>
<td>Mix</td>
<td></td>
<td>Case Studies</td>
<td>US:5</td>
<td>Benefits and challenges of using consensus decision-making in cohousing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Research Techniques</td>
<td>UK:3</td>
<td>Higher social capital in cohousing compared to mainstream practices</td>
</tr>
</tbody>
</table>

Table 4: Classification and Overview of the main primary studies that informed this study. **Source:** Author, 2016.

**List of Abbreviations:** Quali= Qualitative Research; Quanti= Quantitative Research; Interv= Interviews; P.O.= Participant Observation;

**Countries:** DK= Denmark; SWE= Sweden; NL= the Netherlands; CZ= Czech Republic; AUS= Australia; US= United States; UK= United Kingdom; CA= Canada; Other (Melzer's study)= case studies from Australia (2), New Zealand (1), Japan (1).
5.2 How the existing literature on cohousing has shaped this study

The previous section represented an overview of the main primary studies that have informed this study. This section will discuss in detail the findings of existing research on cohousing, looking at how they have informed this study. Then the gaps in the body of knowledge will be examined; as they are integral in shaping the research questions for a study aimed at bringing an original contribution to the literature on cohousing.

Concurrent with the discussion from the beginning of this chapter, and with the previous systematic review, this section will also have a thematic structure. In view of the main aim of this study, this section will only address the four major ‘themes' found to influence the long-term success of cohousing (including the theme ‘interactions’): motivation, development process, physical design, and environmental sustainability.

5.2.1 The importance of motivation for participating in cohousing

While discussing the emergence of cohousing in the US as a form of social movement, Sullivan-Catlin highlights the importance of motives for cohousing residents:

“individual motives for participation in social movements are important because they help explain why an individual becomes part of the mobilization potential” (Catlin-Sullivan, 1998, p.24).

She has undertaken a study not only looking at the motives of individuals for participation in cohousing, but also on their potential influence on the cohesiveness and success of such communities. Jeske’s study on the motivation of individuals to join US cohousing had a more reduced scope, looking just at the motives of individuals for participation. Nonetheless, she mentioned the importance of satisfying motives for participating in cohousing for the success of communities (Jeske, 1992). A similar stance can be deduced from Choi’s research on North-West European cohousing as well; as one section of his quantitative study is dedicated to the motivation for participating in cohousing (Choi, 2004; Choi, Paulsson, 2011; Choi, 2013).
Outside of cohousing studies, various scholars have linked motivation to the success of community activities/social movements. They discussed how the fulfilment of motives impacts the decision of individuals to keep participating. McMillan and Chavis (1986), or Klandermans and Oegema (1987) have highlighted that the decision of individuals to keep participating in communities/social groups is influenced by the attainment of rewards: “the motivation to participate rests on calculations of cost and benefits of participation” (Klandermans, Oegema, 1987, p.529). Such a consideration has been taken into account by Vroom as well, incorporating it in his expectancy theory regarding the motivation of people in work situations (see discussion about his expectancy theory in the motivation chapter).

These considerations, together with informal discussion with cohousing residents and professionals (during the preliminary stage of this study) showcased motivation as an influencing factor for the success of cohousing. The motivation chapter addresses this in detail. This section will showcase how the literature has informed this study; and will discuss how the gaps in the body of knowledge have influenced this research.

a) How the literature on motivation in cohousing has informed this study

Motives for participating in cohousing

The main focus of existing research on the topic was to determine the motives behind the decision of people for participating in cohousing. When examining them more closely, a number of key themes emerge: seeking an enhanced sense of community; practical considerations; enhanced opportunities for self-development; a positive environment for bringing up children.

Seeking an enhanced sense of community: The loss of a sense of community in modern urban settlements, coupled with the disappointment regarding the level of balance in existing intentional communities, were major contributors for the emergence of cohousing (Jeske, 1992; Sullivan-Catlin, 1998).
As such, most studies consider the main motive for people to participate in cohousing as a need for a community-oriented environment in which to live, coupled at the same time with the possibility of maintaining individual privacy (Jeske, 1992; McCammant, Durrett, 1994; Sullivan-Catlin, 1998; Brenton, 2001; Meltzer, 2005; Williams, 2005a; Lee, 2006; Scott-Hunt, 2007; Lietaert, 2010; Sargisson, 2010; Tchoukaleyska, 2011; Sanguinetti, 2012; Sargisson, 2012; Markle, 2013). Cohousing represents in theory a viable alternative for such a community-oriented lifestyle, offering a balance between life in a community, and privacy (Jeske, 1992; McCammant, Durrett, 1994; Bamford, 2004; Meltzer, 2005; Scott-Hunt, 2007).

Cohousing communities have in common the fact that they are explicitly aimed at creating a "socially cohesive and mutually supportive community" (Meltzer, 2005, p.2); while attempting at the same time to achieve a balance between personal privacy and social interactions.

In other words, they seek to "recreate a sense of community, while preserving a high degree of individual privacy" (Lietaert, 2010, p.576). This can be achieved by having separate, private flats/house for each family/individual living in cohousing, regardless of tenure types (individual ownership, rent). Physical design of the community (Fromm, 2000; Marcus, 2000; Palm-Linden, 1992) and various social norms (Meltzer, 2005) are important contributors to this balance as well. This theoretically results in what some consider as 'getting the best of both worlds'.

**Practical considerations:** A second recurring theme among studies looking at the motivation for participating in cohousing (Jeske, 1992; Sullivan-Catlin, 1998; Choi, 2004; Choi, 2013) is related to practical motives. These can be included in what Sullivan-Catlin describes as 'instrumental motivational needs' (Sullivan-Catlin, 1998).

More specifically, cohousing residents are motivated by the existence of supportive networks, which provide “assistance to families and individuals” (Jeske, 1992, p.46). Assistance can come in different forms, from lending tools and providing transportation, to sharing the responsibility for cooking and using the economy of scale to acquire cheaper products (Jeske, 1992; Sullivan-Catlin, 1998; Meltzer, 2005; Williams, 2005a; Choi, 2004; Meltzer, 2010). As Jeske concludes, in the cohousing communities she researched
“respondents felt that there would be opportunities for interdependence and assistance on a daily basis. This included lending tools and helping with tasks related to house and yard maintenance.” (Jeske, 1992, p.48).

Some studies also mention the possibility for receiving emotional support as a motive for participation in cohousing (Brenton, 2001; Williams, 2005a). Especially in the case of senior cohousing schemes, residents prefer to make their own decisions for the later stages of their life, as opposed to these decision being made later by others for them (Brenton, 2001; Williams, 2005a). Furthermore, house management motives were determined as the second most important for participating (after creating a sense of community) among residents of Swedish senior cohousing communities (Choi, 2004; Choi, Paulsson, 2011; Choi, 2013).

Enhanced opportunities for self-development: The cohousing movement, considered a less extreme descendant of 20th century Scandinavian intentional communities (Sargisson, 2012), offers the opportunities for enhanced self-development (or 'accelerated experiences') for its residents. According to some researchers, daily life interactions in a cohousing environment, coupled with the democratic decision-making system, have usually proven to be processes through which an individual discovers more about his/her values, desires, and aspirations (Jeske, 1992; Meltzer, 2005; Williams, 2005a; Poley, 2007). They are faced with situations in which they have to make decisions about their values and about compromise; and have the opportunity to ‘grow’ by having to cooperate with others in the same situation (Jeske, 1992; Meltzer, 2005). According to Poley, due to

“the participatory governance structures of cohousing neighbourhoods, residents are gaining opportunities to develop and practice political skills including self-expression, conflict resolution, organizing for collective action and meeting facilitation”(Poley, 2007, p.140).
A positive environment for bringing up children: Another recurring theme is related to advantages in terms of child-care. In many intergenerational cohousing communities child-care activities are shared on an informal basis, so that members who are child-free lend support to working and single parents (Jeske, 1992; Sullivan-Catlin, 1998; Bamford, 2004; Hunt, 2007; Tchoukaleyska, 2011). This aspect was deemed as very important for some women with children (Sullivan-Catlin, 1998; Meijering, 2006); as they viewed “the opportunity for assistance with raising children” as an important determinant in their decision to move into a cohousing community (Jeske, 1992, p.47).

The need for a secure and positive medium for families with young children was an important factor in their decision to move into intergenerational ‘family-friendly’ cohousing communities (Jeske, 1992; Sullivan-Catlin, 1998; Lietaert, 2010). Parents were of the opinion that in modern neighbourhoods, it is “less safe for children to play unsupervised outside, even in the neighbourhood park, than it was in their own childhoods” (Hunt, 2007, p.10). They viewed cohousing schemes as an “environment where children are protected from traffic, and have access to open spaces” (ibid.), and where they are easily observable by community residents.

Mechanisms that help maintain the identity of the group in face of tensions over divergent motives

Using Kanter’s work on 19th century intentional communities as a starting point, Sullivan-Catlin looked at potential solutions for diffusing divergent needs/desires in US cohousing (Sullivan-Catlin, 1998). In one of her case-studies, she noted the tension between individuals wishing to prioritize more the sense of community, and those focused more on the functional aspects of living in cohousing (ibid.). Her work identified four such solutions aimed at lessening the impact of divergent motivational priorities by maintaining a collective identity, which she termed ‘commitment mechanisms’. They are relevant for the current PhD study, because of their potential positive impact on the cohesiveness and continuity of cohousing communities in such situations.

The four mechanisms mentioned by Sullivan-Catlin are:
- *investment*, related to the emotional and financial involvement of residents in the development and/or functioning the community;

- *communion* mechanisms, such as common meals, traditions etc. that can enhance the sense of belongingness to the community among residents;

- *reciprocity*, based on the feelings of trust and obligation among residents formed as a result of interactions;

- *subgroup formation*- the opportunity for residents who feel that their needs are not met in the ‘overall’ cohousing community to form smaller groups (with individuals having similar interests) within the community.

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**b) Building the research knowledge- the contribution of this study**

The previous section discussed how the existing literature on motivation for participating in cohousing informs this study, highlighting a number of emergent themes. One study goes beyond just classifying motives for participation, looking at the impact of conflicting motivational priorities on the cohesiveness of communities (Sullivan-Catlin, 1998). Nonetheless, a critical review of the existing body of knowledge on the topic reveals a number of gaps, which this study aims to address. These are related to: the research design of existing studies; and the lack of studies looking at the link between motivation for participation and long-term success of communities. By addressing these gaps, this study aims to bring an original contribution to the body of knowledge on cohousing. In order to develop the discussion on the gaps in the body of knowledge and how they shaped this study, first some considerations regarding the literature on the topic of motivation in cohousing need to be addressed.

**Considerations on the primary studies addressing the topic of motivation in cohousing**

Overall, there is a scarcity of primary studies looking at the topic of motivation for participation in cohousing. The literature in this regard is mainly based on Jeske’s (1992),
Sulllivan-Catlin’s (1998) and Choi’s (2004, 2011, 2013) primary research. Their studies represent an important contribution to the body of knowledge on cohousing, by addressing the motivation of individuals for participating in such communities. The former two authors used qualitative techniques and North-American case-studies for their work; whereas the latter used mostly quantitative techniques for researching Swedish and Danish cohousing.

Considerations on the findings from the primary studies on the topic: The findings from the three authors are for the most part concurrent. Jeske establishes five categories of motives for individuals to participate in cohousing: the desire to live in a community; an enriched and more secure medium for children; the possibility for sharing; being a ‘pioneer’; and personal self-development (Jeske, 1992). Sullivan-Catlin comes up with similar categories of motives, which she divides into two main categories: social (e.g. desire for a greater sense of community; communal activities) and instrumental motives for participating in cohousing (e.g. a better environment for bringing up children; mutual support) (Sullivan-Catlin, 1998). However, compared to Jeske’s previous study, her research determines an additional category for participating in cohousing: the dissatisfaction with previous communal arrangements experienced by cohousing residents (ibid.).

More recently, Jung Shin Choi has undertaken significant quantitative research on the topics of life satisfaction, motivation, and common activities in cohousing communities across Sweden and Denmark (Choi, 2004; Choi and Paulsson, 2011; Choi, 2013). His latest article from this series, although drawing the data of his previous research, is focused particularly on the topic of motivation in cohousing (Choi, 2013). His findings on intergenerational North-West European communities yields similar results to the two US studies: that people move to cohousing mainly for ideological (social contacts with other inhabitants; communal activities etc.) and security/practical reasons (mutual support; feeling safe) (Choi, 2013). His overall conclusion is in favour of the former, stating that mostly

"residents move to cohousing wanting to have good contact with other inhabitants through sharing activities according to the idea of cohousing" (Choi, 2013, p. 85).
Choi remarks a significant difference when looking at motivation in different types of cohousing: that housing management reasons (e.g. escaping of worries about house and garden; living in buildings more adapted to the needs of elderly) are an important motive of participation for residents of senior cohousing (Choi, 2004; Choi, 2013); and not for residents of intergenerational cohousing (Choi, 2013).

This represents the main divergence in terms of overall findings when looking at the primary studies on the motivation for participation in cohousing. The findings from North-America on this topic are concurrent with Choi's findings from North-West European intergenerational communities. Only in senior cohousing communities were house management reasons determined as a key motivation for respondents (Choi, 2004; Choi, 2013). However, since no senior cohousing communities were developed outside of Europe at the time of Jeske's and Sullivan-Catlin's research, no further comparisons between the three studies regarding motivation in different types of cohousing (senior vs. intergenerational) can be made.

Considerations on the limitations of the primary studies on the topic: In addition to considerations regarding the findings, some limitations of the aforementioned primary studies must be considered before proceeding with the discussion on the gaps in the body of knowledge (and how they have shaped this research).

First, at the time of Sullivan-Catlin's (1998) and especially Jeske's (1992) study, cohousing was still in its incipieny in North-America. According to Williams, "the architects McCamant and Durrett first introduced cohousing to the USA in 1986" (Williams, 2008, p. 274); with the first community completed in California in 1991 (US Cohousing Network, 2016). To put things into perspective, the first cohousing communities emerged in Europe during the 70s; in Denmark, Sweden and later the Netherlands (Williams, 2005a). As such, between the case studies of the two US authors, the longest standing community was barely over three years old at the time of their research (Sullivan-Catlin, 1998).
This has prompted both authors to recommend research to be undertaken in Europe, where cohousing has a much longer history, and where a longitudinal perspective can confirm, invalidate or 'build-up' on their findings (Jeske, 1992; Sullivan-Catlin, 1998). Most respondents of the two studies were from recently emerged communities in the US and Canada at the time of the interviews; and as such one of the authors admits that "they may not be fully cognizant of all the problems therein" (Jeske, 1992, p.67). Furthermore, given that the studied communities had been recently developed (at the time of the research) and the group was still learning about life in cohousing and about adjusting to each other, Jeske suggests that

"respondents may have felt that they should be positive in their comments because negative remarks would have reflected badly on themselves, the group, the entire project. They may have wanted to present decisions in the best light. The results, therefore, may reflect an overly optimistic portrait of the cohousing model" (Jeske, 1992, p. 67).

In addition to this, there is a limitation regarding one of the two case-studies from Sullivan-Catlin's work. This is because the group was still in the development phase before moving in; and only towards the end of the research did the group secure "an option to purchase a parcel of land and changed its name to reflect the new site" (Sullivan-Catlin, 1998, p. 87). This means that less than half of her respondents (20 ex 50) did not experience living in cohousing per se; as the community was still in the development stage (Sullivan-Catlin, 1998). As such, despite their experience with the development process, respondents from the developing group had no direct experience of living in cohousing; experience that may have influenced/changed their answers.

This also affects the scope of the commitment mechanisms for participating in cohousing determined by the author. Sullivan-Catlin has defined commitment mechanisms as practices aimed at lessening the impact of conflicting motivational priorities during the lifespan of cohousing communities (Sullivan-Catlin, 1998). As such, only her respondents from the already establishes community (30 ex 50) could attest to this. This means that in this regard the findings are limited to the particularities of just one of the case-studies; and to the
responses from just over half of her interviewees. This makes a direct comparison between her two case-studies, which could potentially broaden the scope of the findings, unviable.

Second, the work of Choi (2004, 2011, 2013) represents the first primary quantitative research (and so far the only one identified by this study) addressing the topic of motivation in cohousing, thus significantly contributing to the body of knowledge. Two limitations of his work can however be distinguished.

The author mentions that quantitative data were supplemented by a number of (unspecified) interviews for his first study (Choi, 2004); however there is a lack of evidence that they were used for discussing his findings. The discussion throughout all his papers is focused on the interpretation of the quantitative data from the survey. Furthermore, mentioning his past research on cohousing, he highlights that the findings are "based on only quantitative research by questionnaire" (Choi, 2013, p.85). Therefore, the author himself suggests that using qualitative methods such as in-depth interviews for determining the motivation of residents for participating in cohousing "could enrich interpretation of the research result" (ibid.).

In addition to this, there is an issue regarding the statistical significance of his results in relation to the entire cohousing population relevant to his research (senior and intergenerational communities from Denmark and Sweden). The author mentions that the response rate for his first study (Choi, 2004) was just 57.3%; whereas for his following research (Choi, Paulsson, 2011; Choi, 2013) it was 68.6%. The author provides significant evidence regarding the statistical relevance of his findings in relation to the total amount of data gathered. However, there is no discussion of the relevance of his findings in relation to the response rate (considering, at least for the first study, a response rate of a bit over 50%). It is possible for responses from communities who declined to participate to shift the results. Even if the results are statistically significant in relation to the entire population relevant to his research, the author does not discuss it throughout his papers.
Contributing to the body of knowledge in terms of research design

The two main qualitative studies on motivation in cohousing (Jeske, 1992; Sullivan-Catlin, 1998) were undertaken about two decades ago using data from two (forming or recently emerged) North-American cohousing communities each. At that time, the cohousing movement was still in its infancy outside of Denmark, Sweden and the Netherlands. Therefore, respondents did not experience living for a longer period (or not at all, in case of the forming community from Sullivan-Catlin's study) in cohousing when the two studies were undertaken. This prompts Jeske to mention the need for a study with individuals “who had actually lived in the cohousing community for a period of time” (Jeske, 1992, p.69).

All these considerations influence the rationale for a specific research design of this study: a study looking at the topic of motivation in North-West European cohousing communities would contribute to the body of knowledge, due to the limitations of these earlier studies. Case-examples and respondents with a longer history would have to be selected in order to avoid the limitations of the two American studies. As a consequence (as detailed in the methodology chapter), half of the case-examples for this study from Sweden, Denmark and the Netherlands (8 ex 16) have a history of over two decades. Furthermore, respondents who have been living in cohousing for a longer time (preferably from the development phase) have been selected from each researched community. Both these measures help address the limitations of the above two US studies, in terms of: the lack of a longitudinal perspective from their respondents; and the infancy of the cohousing movement in the US at that time.

Besides these two US studies, Choi’s work has also influenced the rationale for the research design of this study (Choi, 2004; Choi, Paulsson, 2011; Choi, 2013). The author himself admits that qualitative research would be needed in order to better understand the signification of his quantitative findings (Choi, 2013). In addressing this recommendation, this study is qualitative; the main data collection method consisting of semi-structured interviews with cohousing residents.
Contributing to the body of knowledge by examining the link between motivation and the long-term success of communities

Perhaps the main drawback of the body of knowledge on motivation in cohousing is the lack of primary research that goes beyond individual motives; and also looks at how it is linked with the long-term success of communities. The only primary study so far that goes beyond individual motives is that of Sullivan-Catlin; however it focuses solely on practices aimed at lessening conflicting motivational priorities. It is beyond the scope of her study to look if and how the main motives for participation in cohousing have a direct effect on the success of the communities. This gap in the existing body of knowledge on the topic is especially important because of two considerations. These stem from some potential tensions related to the cohousing environment.

First, studying the literature, there is an apparent tension regarding two categories of motives for participating in cohousing: the desire for more community, on one hand; and the desire for practical support, on the other hand. These can be broader categorized as ‘social’ and ‘instrumental’ motives for participation (Sullivan-Catlin, 1998). These two are not mutually exclusive; and the literature so far has revealed that both can be a desired consequence of living in cohousing (see previous section). The communal meal seems to be a prime example of this. It provides an opportunity for interaction among neighbours, thus enhancing the sense of community; and can be quite practical as well, especially for parents with young children who do not have to cook dinner every day after coming from work.

Nonetheless, the literature so far has not investigated the long-term effects on cohousing communities if the tension between these two motivational categories is not resolved. For example, what if people are motivated to move into cohousing solely due to practical benefits, without being motivated by a higher sense of community compared to mainstream settings? How would this impact the long-term success of communities? The literature so far has not addressed these questions; and the focus of the research questions from this study takes this into account (see figure 6).

Second, there is an obvious tension between the desire for more community (compared to mainstream) and need for personal privacy as well in cohousing. This aspiration has been
presented by the existing literature as the main motive for people to participate in cohousing. Nonetheless, some implications on the long-term success of cohousing can be deduced from this tension; because these two aims are inherently contradictory.

Since cohousing communities aspire to have ‘the best of both worlds’, the levels of interaction and commitment are presumably reduced compared to other, more intense types of intentional communities (such as communes or Kibbutzim, for example). This is reflected in the informal levels of support in cohousing. The literature suggests that help with child-care, lending of items, bulk buying, emotional support etc. happen mostly on an informal basis. The literature suggests (but it is not clearly evidenced) that if they would be formalized, the setting might become too ‘intense’ for its purpose, more like a commune (see Williams, 2005a).

This leads to questions regarding the fulfilment of motives for participation (social and especially instrumental). How can the fulfilment of these motives be empowered, in absence of formal procedures? Cost/benefit theorist such as Klandermans and Oegema consider the attainment of rewards as key for social movements (Klandermans, Oegema, 1987). Vroom’s expectancy theory is also based on the premise that ‘instrumentality’ - the capacity of a setting to satisfy the motives for undertaking an action- is positive. Otherwise, the motivation would be nil (see motivation chapter for a comprehensive discussion of the expectancy theory in relation to cohousing). In view of such theories, the fulfilment of needs for participation in cohousing can be linked with the long-term success of communities. In other words, if the aspirations of individuals are not fulfilled, their motivation to keep participating will be reduced; which can have important consequences for the long-term success of communities.

However, the literature so far identified did not address these issues. As such, a study that looks beyond just the motives for participation, investigating how they can affect the long-term success of cohousing communities, could represent an original addition to the existing body of knowledge on cohousing. The main aim of this study- determining the factors influencing the long-term success of cohousing- is intended to help address this gap. The considerations discussed throughout this section have shaped the research questions of this study related to the motivation of individuals for participating in cohousing, and their effects on the long-term success of communities (see figure 6).
Furthermore, still related to the topic of motivation in cohousing, Sullivan-Catlin concluded that there is a likelihood for the appearance of conflicting motivational priorities over the lifespan of cohousing communities. She revealed four practices aimed at lessening such conflicting motivational priorities (see previous section). Given that such conflicting priorities, and practices aimed at lessening them, can influence the long-term success of cohousing; the motivation chapter of this study will investigate these as well.

5.2.2 The development process of cohousing

The context chapter of this Thesis identified the participatory process underpinning the development phase as one of the key characteristics of cohousing. The participatory process makes cohousing a ‘bottom-up’ development, contrary to wide-spread traditional ‘top-down’ urban development practices (Brenton, 2001; Williams, 2005a). Its aim is twofold: to create a united group that will create a sense of community once they move in; and to customize the projects to reflect the desires, needs and values of the (future) residents (Meijering, 2006; Durrett, 2010; Sargisson, 2012). Cohousing scholar Dorit Fromm sums up its role, concluding that

“this development process already begins to build ‘team’ cohesion by forming alliances among future residents, and between residents and local organizations and the municipality. These intertwined roots help create a sense of collaboration that can, after project realization, stretch into the community” (Fromm, 2012, p.388).
These considerations, together with informal discussion with cohousing residents and professionals (during the preliminary stage of this study), showcased the participatory process as a potential influencing factor for the success of cohousing. The development phase chapter addresses this in detail.

The literature review on the development process in cohousing has been important in giving an overall view on the topic. It revealed a number of recurring themes linked to the advantages, challenges and ways of ‘streamlining’ the process. The literature review also highlighted a number of gaps in the existing body of knowledge on the topic of the development process of cohousing. These will be tackled in this section.

a) How the literature on the development process of cohousing has informed this study

Advantages and challenges of the participatory process

The participatory process implies that the group of future residents “organise and participate in the design and development of their project” (Meltzer, 2005, p.4); as “each group defines both the physical structure and internal rules” of the future community (Ruiu, 2015, p.633). According to Fromm,

“a number of sources show that it is residents' involvement in the development process that lays the foundation for the strength of community once moved in” (Fromm, 2000, p.3).

The long development process ensures that individuals get acquainted with each other and usually decide whether such a lifestyle would suit them or not, even before moving in. This can contribute to the initial cohesiveness of communities, as in theory the group that actually moves in is committed to the values of a particular community. Prospective residents

“understand what they are embarking upon, and have ample time to decide whether or not the particular community they are shaping, or this way of living in general, is likely to be their cup of tea. Many households pull out in the development phase, and are replaced by others” (Bamford, 2004, p.5).
However, this approach to development results in a time-consuming process, requiring many hours of participation, planning, and decision-making (Jeske, 1992; Sullivan-Catlin, 1998; Crabtree, 2005; Meltzer, 2005; Lietaert, 2010; Scanlon, Fernandez, 2015). According to Fromm, the development process of US cohousing communities averages around four years (Fromm, 2000). That is because in order to develop a cohousing community,

“a group must be formed, a process for decision making must be agreed upon, a legal entity must be created, a site must be identified and secured, plans must be designed, consultants, architects, and builders must be hired, zoning permits and approvals as well as financing must be obtained, and relationships among the members must be developed” (Sullivan-Catlin, 1998, p.13).

As such, Meltzer concluded that the development process implied “thousands of hours of meetings and the participation of many people” (Meltzer, 2005, p.4). According to Jarvis, this makes the development process a challenging balancing act between “a creative culture of openness with a drive to keep the group moving forward” (Jarvis, 2015, p.101); and appears to “be a major cause of conflict and unravelling in the early stages of community development” (ibid.).

Supporting this view, Williams notices that in one of her studies, “in both communities resident involvement in the decision-making processes had also created conflict”; and “design decisions had created some of the biggest conflicts in both communities” (Williams, 2005b, p.211). Adding to that are issues with “approval of projects by institutions, finding money and a construction company, and rejection by local communities” (Ruiu, 2015, p.639); as well as difficulties in competing for land with ‘mainstream’ developers (Williams, 2005a; Scanlon, Fernandez, 2015). This makes Brown conclude that

“the cohousing development process requires a greater level of commitment and a greater assumption of risk than any other housing choice a potential resident could make” (Brown, 2004, p.21).
It is important to note here that Fromm (2000), Jarvis (2011), Ruiu (2015), and Scanlon and Fernandez (2015), all mentioned turnover during the development phase as a challenge of cohousing development, especially once serious financial commitments are required. These statements challenge Siciliano’s tentative remark, who mentions that “overall, cohousing is probably a lower-risk endeavour than speculative [developments] since there is a group of people ready to buy the units” (Siciliano, 2009, p.93).

**Alternative models for the development process of cohousing**

Because of the challenges faced by cohousing groups during the development process, on one hand, and its importance for the cohesiveness of the future communities, on the other; there have been different solutions aimed at reducing the development time, as well as the involvement and financial burdens for people interested in life in a cohousing setting (Brown, 2004; Williams, 2005a; Williams, 2008; Siciliano, 2009; Karnekull, 2010, in: Vestbro, 2010; Ruiu, 2015; Scanlon, Fernandez, 2015). According to Karnekull, there is a need

> “to develop project models that do not require the same amount of effort from their users, as the entirely group-run projects do” (Karnekull, 2010, in: Vestbro, 2010, p.128).

Such support can come either from local authorities or through a partnership with an external developer. Local authorities can support cohousing through: planning regulations that are more ‘friendly’ towards resident-led developments such as cohousing (Williams, 2005a; Brenton, 2013); or by ‘reserving’ some land for such developments, and helping to increase awareness regarding the cohousing model (Williams, 2005a). A partnership with an external developer that can take over some of the burdens of the cohousing group can result in a faster and easier development process (Williams, 2008); or provide the means for the community to become a reality (Ruiu, 2015; Scanlon, Fernandez, 2015). From the point of view of developers and local authorities, such partnerships can provide benefits as well, in terms of: the positive wider impact that cohousing communities can have on a specific area (e.g. involvement in local groups and initiatives) (Ruiu, 2015); and in terms of their agenda (e.g. including social housing tenants in cohousing projects supported by social housing landlords) (Fromm, 2012; Ruiu, 2015).
b) Building the research knowledge - the contribution of this study

A critical review of the existing body of knowledge on the topic reveals a number of gaps, which this study aims to address. These are related to: the research design of existing studies; and the lack of in-depth focus regarding the effects of the development process on the success of cohousing communities. By addressing these gaps, this study seeks to bring an original contribution to the body of knowledge on cohousing.

Considerations on the primary studies addressing the development process of cohousing

Overall, there is a scarcity of primary studies looking at the development process of cohousing. The literature in this regard is mainly based on Williams' (2005a; 2008), Scott-Hunt's (2007), Ruiu's (2015), and Scanlon and Fernandez' (2015) primary research. Their studies represent an important contribution to the body of knowledge on cohousing, by addressing the advantages and shortcomings of the development process for cohousing. In terms of the development process, the former author uses qualitative methods for researching North-American case-studies (Williams, 2005a; Williams, 2008). The others use qualitative methods as well, however they focus on the UK context.

Considerations on the findings from the primary studies on the topic: Notwithstanding Scott-Hunt's study (2007), entirely focused on the legal aspect of developing cohousing; the findings from the other primary studies on the topic are for the most part concurrent. Regardless of researching US or UK communities, all four primary studies (see above) come to the conclusion that the participatory development process is challenging, but important for creating an initial sense of community after moving in. All of them consider the end-result of the participatory process the formation of a cohesive group, ideally in a community that fits the needs of its residents.

Williams has come to this conclusion regarding the important, yet challenging nature of the participatory development process after researching a number of US (more specifically, Californian) communities (Williams, 2003 and 2006 -unpublished; Williams, 2005a; Williams, 2005b; Williams, 2008). She notes that a cohesive group is eventually formed due to the nature of the participatory process before moving in, as the future "residents are
involved in recruiting other residents for the community, development, design, management and [after moving in] maintenance of the community" (Williams, 2005a, p. 147).

Both Ruiu (2015) and Scanlon and Fernandez (2015) come to the same conclusion; however while focusing on the particularities of a single UK cohousing community each. Ruiu uses the Threshold community in the UK to exemplify the challenges of the participatory process (Ruiu, 2005). She describes how the group had to overcome financial issues and preconceived ideas from planning authorities and neighbours, in addition to striving to develop a united group. Because of this, she compares the development of Threshold to Tuckman's stages of small group development (see development process chapter for more details); highlighting how the Threshold group has gotten to 'performing' (cohesive group) only after going through a serious 'storming phase' during the development stage (ibid.).

Similarly, Scanlon and Fernandez mention the main advantages of the participatory development process before moving in, emphasizing that the "elimination of the participatory design phase means that the group cannot shape the physical space or benefit from the community-building opportunity this provides" (Scanlon, Fernandez, 2015, p. 109). However, while researching the development of a senior cohousing community in the vicinity of London, they conclude that the duration of the development process (compared to standard housing developments) represents a major challenge for the future residents: "the group itself is involved in deciding on the features that their new community will have, and the group decision-making process is an iterative and time-consuming one" (Scanlon, Fernandez, 2015, p. 111). This contributes to what they consider as an overall challenge for cohousing development in the UK, because

"speculative developers [will] outbid cohousing groups in free market land sales, especially in areas of high housing costs, such as London and southern England. This is one reason that many UK cohousing groups must search for years for a suitable and affordable plot" (Scanlon, Fernandez, 2015, p. 119).
The importance of the participatory process in forming a cohesive group even before moving in, coupled at the same time with its aforementioned challenges, have prompted all three authors (Williams, 2005a, 2008; Ruiu, 2015; Scanlon, Fernandez, 2015) to recommend a partnership with an external developer. This can be seen as a potential solution for easing the burdens of the development process. In view of the current discussion, this represents another major aspect related to the development process where the findings of the primary studies seem to converge. The only difference is that Williams regards a partnership with a developer as an overall better solution to other development approaches; whereas Ruiu and Scanlon and Fernandez mention some drawbacks stemming from the experience of their case-studies.

Williams is very categorical in this regard, emphasizing that a partnership can remove many risks of the standard, resident-led approach:

"developers can be very helpful in facilitating the development of cohousing communities because they already have access to potential sites, expertise and finance. Their involvement reduces residents’ time and financial commitment on projects and provides access to the resources needed for development" (Williams, 2008, p. 270).

She views this approach to cohousing development as an overall better approach; minus the case when the developer takes all the initiative during the process, resulting in a limited involvement of future residents (speculative, 'top-down' model of development). Ruiu makes a similar point related to the advantages of a partnership, concluding that in the case of Threshold cohousing, the partnership (between the group of future residents and an UK housing association) led to

"higher heterogeneity (in economic, cultural and social backgrounds of cohousers); reduced approval and construction timescales; reduced costs; possibility for social housing inhabitants to take part in the decision-making process (and managing the community life)" (Ruiu, 2015, p. 642).

It happened because the housing association contributed for half of the development cost, making the development possible. This situation led to negotiations between them and the
The cohousing group for adding a social character to the development. As a result, half of the properties are occupied by cohousing residents who are eligible for social rents (ibid.). Nonetheless, following negotiations an agreement was struck between the cohousing group and the housing association regarding the procedure for accepting new residents (ibid.). In its absence, the cohesiveness of the community might have suffered (if, for example, the housing association starts to impose their tenants without consideration for the cohesiveness of the cohousing community); thus highlighting a potential drawback of the partnership model or development.

Scanlon and Fernandez have a similar stance with Williams and Ruiu regarding the advantages of a partnership with a developer for cohousing development, emphasizing that

"housing associations are in many ways ideal development partners: they are experienced builders and their financial strength can enable the purchase and development of land that would otherwise be inaccessible to cohousers; they are social-housing providers who can facilitate the inclusion of the social rental and shared-ownership housing that local authorities require [...]" (Scanlon, Fernandez, 2015, p. 109).

However, they see some drawbacks for this approach as well. They mention that the hierarchical structure of developers/housing associations, coupled with their traditional focus on profit, can lead to serious conditions imposed on the cohousing group in exchange for their help (ibid.). Their view is supported by the research of Crabtree, who described a partnership approach in Australia as “a source of both opportunity and constraint” for the cohousing group (Crabtree, 2005, p. 337); due to the role of their partner, a “housing provider, which was revealed, despite rhetoric about community empowerment or participation, to be very much about maintaining a dominant delivery role to passive recipients” (ibid., p.338).
Considerations on the limitations of the primary studies on the topic: A common observation for the primary studies on the development process of cohousing discussed in this chapter is that they do not specify the sample size. Ruu (2015), Scanlon and Fernandez (2015) and Williams (2005a; 2008) all mention semi-structured interviews as a key data collection technique for their study. However, none of them provide any details in their published work regarding the number of respondents that took part in their study. Even though the purpose of qualitative research is not statistical significance (see methodology chapter); details regarding sample size would have given the reader a better understanding of the scale and scope of the respective studies.

In addition to this, there is a limitation for two of the studies as well. The studies of Williams (2005a; 2008) deal with more than just one aspect of cohousing, looking at its: history, development process, environmental sustainability, affordability, and institutional context for development in California and the UK. This is because the main aim of her papers is to examine the future potential of the setting in the US and the UK. However, this wide focus comes with some drawbacks in terms of her affirmations regarding the development process of cohousing. Her work is the first (an only one so far) attempt identified by this study at classifying the various development models of cohousing. She mentions that she adapted Davis' unpublished work from 2001 for this purpose (Williams, 2005a). She refined it so that it comprises of three overarching development models for cohousing communities: a resident-led model of development; a partnership model between residents and an external developer; and a speculative top-down model, led by a developer (Williams, 2008).

Despite of the importance of this classification, it must be mentioned that the author provides little evidence in the published articles about: the data that led her to devise the table with the three development models; and whether the boundaries between the models are definitive or not. For example, a table that categorizes her researched US communities based on their model for development (as detailed in the classification table) could help test the validity and boundaries of her classification.
Contributing to the body of knowledge in terms of research design

The overall scarcity of primary studies on the development process of cohousing, coupled with the focus of existing studies, leave a gap in the body of knowledge. Williams’ studies (2005a; 2008) used data solely from the US when addressing the development process of cohousing. In this regard, research on North-European case-studies could represent an addition to the body of knowledge; allowing for comparison between the findings from North-America to Europe, where cohousing has a much longer history (see introduction chapter of this Thesis).

More recent studies on the impact of the development process on the success of cohousing have helped address this gap, by focusing on the UK context for developing cohousing (Scanlon, Fernandez, 2015; Ruiu, 2015). However, despite their important contribution to the body of knowledge; these two studies focus each on the particularities of a single community. Ruiu’s work is focused on the development of the Threshold community in Dorset; whereas Scanlon and Fernandez use a developing senior cohousing community from the London area as their case-study. Thus, their findings are limited to the specific conditions of the respective two communities, and might not necessarily be applicable for other types of cohousing. This is where a cross-sectional study, looking at the impact of the development process across different cohousing communities, can prove advantageous.

The gaps in the body of knowledge following the focus of these major primary studies have influenced the rationale for the research design of this study. By using a cross-sectional approach of North-West European case-studies, it may contribute to the body of knowledge on the development process of cohousing.

Contributing to the body of knowledge by looking at the effects of the development process on the success of cohousing

In two of her research articles, Jo Williams categorizes the different models for developing cohousing (Williams, 2005a; Williams, 2008). Despite emphasizing the potential benefits of a partnership between the cohousing groups and a developer (Williams, 2008); her research on the topic does not provide a comprehensive discussion (other than general remarks) regarding the effects of the different models on the success of the communities. Nonetheless, her
classification of cohousing development models raises questions regarding their different influence on the outcome and success of cohousing communities.

One of the models (‘speculative’ model for developing cohousing) resembles more a ‘top-down’ approach rather than a participatory process, with minimal influence of future residents during the development stages. As such, it is important to investigate its effects on the formation of a cohesive group and a community that fits the desires of its residents. These are the main advantages of the participatory process, according to the literature (see previous section); and are developed following the involvement of residents in the major aspects of the future community. Since this participatory element seems to be missing from this more top-down oriented approach to cohousing development; it raises the obvious question regarding its potential for developing a cohesive community that fits the desires of its residents. The identified literature on cohousing has not addressed this, beyond some general remarks.

Another question is raised by the two more recent UK studies looking at the development of cohousing (Ruiu, 2015; Scanlon, Fernandez, 2015). Both focus on the challenges of the process for the cohousing group, and on the potential benefits of forming a partnership with a developer for lessening these challenges. They are a welcome contribution to the scarce body of knowledge on the topic, especially in the UK context. However, neither of these two studies tackled an apparent tension that results from such a partnership, nor did others who looked at the potential benefits of forming a partnership (e.g. Williams, 2005a).

An external developer has been deemed important for helping the cohousing group with finances, technical assistance, thus lessening the burden on the shoulders of the future residents (see previous section). However, in view of Tuckman’s stages of small group development (Tuckman, 1965), overcoming the ‘storming’ phase is an essential aspect for the formation of a united group (for a detailed discussion about this see development phase chapter). This raises the question: whether a partnership with a developer might have negative effects on group cohesiveness by taking away some of the main challenges of the participatory process. Thus, it can potentially lessen the effects of the ‘storming phase’ for the cohousing group. There is no research on this potential dilemma so far.
In view of these considerations, a study that gives a comprehensive overview on the effects of the participatory process on the success of cohousing, taking in mind the above limitations of existing research, could represent an original addition to the body of knowledge. Such a study would need to look at both the advantages and challenges of the participatory process; while also taking into account the effects of the various development models of cohousing, and the enablers and barriers for the development process. These considerations have shaped the research questions of this study related to the development process of cohousing, and its effect on the long-term success of communities (see figure 6).

5.2.3 The physical design of cohousing

The literature review on the physical design of cohousing reveals an interesting tension in terms of physical design; one that reflects the tension caused by the two ‘inherently’ opposed aims of cohousing: enhancing the sense of community; and allowing for personal privacy. More specifically, the literature mentions a number of recurring themes linked to design parameters aimed at enhancing social interaction, on one hand; and allowing for privacy when needed, on the other hand. The review also highlighted a number of gaps in the existing body of knowledge on the topic of the physical design of cohousing. These will be tackled in this section.

a) How the literature on the physical design of cohousing has informed this study

Design measures aimed at enhancing social interaction in cohousing

Existing studies give a lot of attention to the capacity of the physical design for fostering social interaction within cohousing (Fromm, 2000; Marcus, 2000; Torres-Antonini, 2001;
Meltzer, 2005; Williams, 2005b; Poley, 2007; Scott-Hunt, 2007; Glass, 2009; Siciliano, 2009; Lietaert, 2010; Sargisson, 2010). Some patterns aimed at fostering interactions stand out:

Corralling the cars at the edge of the site: A design measure aimed at fostering interaction is the parking of cars at the edge of the site; ‘forcing’ residents to walk from their cars to the front doors of their homes (Sullivan-Catlin, 1998; Fromm 2000; Marcus, 2000; Torres-Antonini, 2001; Bamford, 2004; Meltzer, 2005; Williams, 2005a; Williams, 2005b; Scott-Hunt, 2007; Glass, 2009; Lietaert, 2010; Sargisson, 2010). This increases the safety of children on-site; allows more space for outdoor areas, such as communal greens; encourages the use of non-motorized transport modes; and most importantly, enhances casual social interaction:

“the idea is that people will walk to and from the parking areas and meet each other along the way” (Sargisson, 2010, p.11).

According to Meltzer, “the corralling of vehicles at the edge of the site appears to have consolidated as a fundamental planning strategy” (Meltzer, 2005, p. 117). Clare Marcus comes to a similar conclusion, stating that “observations at the six communities visited indicated that a great many encounters occur as people walk back and forth from their homes to group parking areas” (Marcus, 2000, p.15).

Reduced size of private homes: Private residences in cohousing communities, although designed to encompass all facilities of a self-sufficient unit (including a kitchen), are usually smaller in size than conventional homes (Sullivan-Catlin, 1998; Meltzer, 2005; Sargisson, 2010; Sanguinetti, 2012; Stratmann, Weiss-Ferreiro, Narayan, 2013; Sundberg, 2014). This measure is aimed at fostering social interaction in cohousing, by encouraging the use of the common facilities available for residents (Sullivan-Catlin, 1998; Meltzer, 2005; Sargisson, 2010; Sanguinetti, 2012).

Using quantitative comparisons, Graham Meltzer concludes that in the United States, “cohousing dwellings are about half the size of typical new-built houses” (Meltzer, 2005, p.121). Sundberg indicates that compared to average Swedish mainstream settings, the floor
area of private flats in a Swedish cohousing community is smaller by about a quarter (Sundberg, 2014).

According to Fromm, in the US and Canada “space reductions occur in the kitchen, dining room, hallway, and living room, as the common house has taken over some of these functions” (Fromm, 2000, p.6). This is because the common spaces are considered an extension of the private houses that can be used by all (adult) residents; hence less need for space in private dwellings:

“the loss of space in the private unit is supported by the provision of communal facilities such as communal kitchen/dining areas, laundry, gym, workshop/hobby room, guest bedroom, entertainment room, garden, storage space” (Williams, 2005a, p.147).

Visual access to the common house: Some studies suggest that one of the ways to foster social interaction in cohousing is through the visibility of the common house from the private dwellings of the residents of the community; usually by locating the common house (the symbol of most cohousing communities) centrally relative to the site (Jeske, 1992; Torres-Antonini, 2001; Meltzer, 2005; Poley, 2007; Scott-Hunt, 2007; Williams, 2008; Sargisson, 2010; Sanguinetti, 2012; Sargisson, 2012). This measure is aimed at making people aware if there are any gatherings or spontaneous encounters/activities in the common house, thus giving them the possibility to participate (Sargisson, 2010). According to McCamant and Durrett,

“ideally, no matter what kind of site plan, the common house is centrally located among the units, within view of each unit, so that residents can spot activity there from their front door and be drawn toward joining in” (McCamant and Durrett, 1988, in: Fromm, 2000, p.5).

Design measures aimed at enhancing privacy in cohousing

Besides enhancing interaction, the role of the purposeful physical design of cohousing is to allow for privacy as well: “physical design encourages both social contact and private space” (Poley, 2007, p. 32). Thus, cohousing scholars acknowledge its importance for fostering the
balance sought by the cohousing environment (Palm-Linden, 1992; Marcus, 2000; Torres-Antonini, 2001; Williams, 2005b; Poley, 2007). Accordingly, residents of cohousing communities dwell in their own self-sufficient private houses/flats (McCamant, Durrett, 1994; Sullivan-Catlin, 1998; Torres-Antonini, 2001; Meltzer, 2005; Williams, 2005b; Poley, 2007; Sargisson, 2012; Markle, 2013). In addition to this, the literature mentions some design measures specifically aimed at enhancing privacy in cohousing.

For example, some studies reveal the importance of ‘buffer zones’ for private houses, in the form of front porches and/or especially backyards, as a mean of enhancing personal privacy (McCamant, Durrett, 1994; Sullivan-Catlin, 1998; Marcus, 2000; Meltzer, 2005; Williams, 2005a; Williams, 2005b). According to Marcus’ preliminary research in North-West European cohousing communities,

“it is perhaps significant that there were more complaints about intrusions on privacy [...] where individual dwellings abut directly onto a semi-public walking street without the ‘buffer’ of a front porch or small front garden, than at any of the other communities visited” (Marcus, 2000, p. 15).

Studies also highlight the importance of the “gradual transitions between public and private space” (Williams, 2005a, p.147), consisting of the orientation of some spaces belonging to private dwellings (e.g. kitchen, balcony, porch) towards walkways and shared spaces. This measure further enhances children’s safety and socializing opportunities; as well as contributing to personal privacy (Sullivan-Catlin, 1998; Sargisson, 2010; Tchoukaleyska, 2011; Sanguinetti, 2012).

b) Building the research knowledge- the contribution of this study
The review of the existing body of knowledge on the topic of physical design in cohousing reveals two gaps, which this study aims to address: the lack of primary studies investigating the physical design of cohousing in both ‘single-’ and ‘multi- building’ communities; and the scarcity of primary studies that look at the impact of the built environment on behaviour patterns (environment-behaviour studies). By helping to address these gaps, this study seeks
to bring an original contribution to the body of knowledge on cohousing, specifically, and environment-behaviour studies, generally.

Considerations on the primary studies addressing the physical design of cohousing
There is a scarcity of primary studies looking at the physical design of cohousing. The literature in this regard is mainly based on Marcus' (2000), Fromm's (2000), Palm-Linden's (2000) Torres-Antonini's (2001), and Williams' (2005b) primary research. Their studies represent an important contribution to the body of knowledge on cohousing; by highlighting how the built environment can influence the long-term success of communities (see previous section). The methods of these studies are varied: some use a mix of spatial analysis with qualitative techniques such as interviews (Palm-Linden, 1992; Torres-Antonini, 2001; Williams, 2005b); whereas others do not include a spatial analysis, relying just on qualitative (Marcus, 2000: interviews) or mixed techniques (Fromm, 2000: post-occupancy survey; semi-structured interviews).

Considerations on the findings from the primary studies on the topic: The findings of the primary studies on the physical design of cohousing are generally concurrent. This is regardless of whether they deal with European (Marcus, 2000; Palm-Linden, 1992) or North-American (Fromm, 2000; Torres-Antonini, 2001; Williams, 2005b) case-studies.

All authors mention in one form or another that the scope of the physical design in cohousing is twofold: on one hand to foster interaction; and on the other hand to allow for privacy as well. The link between physical design and the feeling of security of cohousing residents has been addressed by some of the studies as well (Marcus, 2000; Torres-Antonini, 2001; Williams, 2005b); although to a lesser extent compared to previously mentioned scope.

Consequently, regardless if researching European or North-American cohousing, and regardless of the research design, the same design measures for fostering social interaction keep recurring among the identified primary studies on the topic. One rationale for that is mentioned by Torres-Antonini, who considers
"the prescription of social contact design features as essential ingredients of cohousing, endorse the belief that specific patterns in the built environment are one variable for creating and sustaining deeply connected neighbourhoods. As a consequence, "thirty years of cohousing experience in Scandinavia and ten in North America have confirmed these strategies as best practices—by inference that they are the best fit for the social interaction and supportive behaviours to which cohousing residents aspire" (Torres-Antonini, 2001, p. 194).

Design measures such as coralling the cars at the edge of the site (thus making residents walk the communal pathways to reach their homes), having visual access towards the common house, and reduced size of private houses (compared to national averages), have been found by all identified primary studies to be key measures enhancing spontaneous interactions in cohousing..

Studies also emphasize the importance of outdoor privacy in cohousing, especially in communities with a higher density of the built environment (e.g. Torres-Antonini, 2001; Williams, 2005b). They mention outdoor 'buffer zones' (such as private front yards and backyards) as an important design measure that can affect the long-term success of communities, by enhancing the possibilities for privacy of the residents. Once again, these measures are mentioned in virtually all identified primary studies on the topic of physical design in cohousing. This showcases once again that the findings between the identified primary studies on the topic are concurrent.

The one exception among the primary literature on the physical design of cohousing is the research of Palm-Linden (1992). Contrary to the other studies, she researched cohousing communities solely in blocks of flats/'single-building'. In cohousing communities developed in a block of flats, there is no separate communal building that encompasses the main indoor shared facilities of the community. Instead, there are shared areas, usually located at the ground floor of the building (see design chapter). There are no individual houses overlooking the central path or common green of the community; but private apartments located in the different floors of the building. These are connected by stairs and (usually) elevators. The
difference between the two types can usually be related to the amount of existing space for development in urban areas compared to rural or semi-urban areas; and/or to the character of the development (new built versus retrofitting an already existing building). Cultural considerations can also play a part.

Of importance to this discussion is that important design parameters from ‘multi-building communities’, such as pedestrian paths and lack of parking lots on-site, visibility of the common house, need for front yards to enhance privacy etc., are not directly applicable for blocks of flats. However, it can be noticed that most of the principles behind the site design from the other studies (looking at 'multi-building' communities) can be extrapolated to Palm-Linden's findings on 'single-building' communities. She mentions the role of transition zones (entrance areas, elevators/stairs) in fostering casual social interaction; a very similar purpose to corralling the cars at the edge of the site (a method determined by the other primary studies as key for fostering interaction). In the latter case cohousing residents have to walk from the parking lot to the entrance of their homes, a situation which enhances spontaneous meeting with neighbours (thus aimed to increase the sense of community). In blocks of flats the same role is attributed to the entrance area and transition zones such as stairs and elevators (Palm-Linden, 1992). As the author remarks,

"the meeting of the private and common sphere takes place in the transition zone. Thus the social conditions depend to a great extent on the spatial characteristics of this area"
(Palm-Linden, 1992, p. 9).

As such, it is here where most casual interactions occur (Palm-Linden, 1992). In one of her researched communities, the author concluded that "the elevator is the most integrated space in the building" in terms of social interactions (ibid., p.10). Thus, it has been used as a notice board: "sometimes I go all the way up just to get time to read everything", confesses one of her respondents from the respective community (ibid.).

A similar point can be made regarding the importance of privacy in Palm-Linden's study. While in 'multi-building' communities private front yards and backyards are considered important for enhancing privacy; in case of blocks of flats (where these measures do not apply directly) an important consideration is given to access routes, and to the relative
location of individual flats compared to the communal spaces. As Palm-Linden concludes, the placement of private flats is important for the sense of privacy of residents (ibid.). She gives an example from one her researched communities, where

"inhabitants deep in the building [compared to flats close to entrances or to transition zones] feel, they say, that this is a 'calm and nice' position where few persons pass. [...] People living here seem to look upon their landing as more private than other areas ” (Palm-Linden, 1992, p. 6).

Therefore, it can be stated that even if design measures cannot be the same between 'single-' and 'multi-building' cohousing communities, the principles behind them are similar. This can be ultimately attributed to the fact that the scope of cohousing and associated design principles are the same, regardless if communities are built as ‘multi-’ or ‘single-building’ communities.

Considerations on the limitations of the primary studies on the topic: There seems to be a gap in the findings when extrapolating design measures from 'single' to 'multi-building' communities, and vice-versa. As mentioned previously, the principles behind design measures remain constant; even though some individual measures will cater to 'multi-building', and some to 'single-building' communities. However, there is a design principle which seems to have been left out in one of the primary studies on the topic.

The literature review has identified the visibility of the common house as a key design principle fostering social interaction in 'multi-building' cohousing communities (Marcus, 2000; Fromm, 2000; Torres-Antonini, 2001; Williams, 2005b). This allows residents to observe if some spontaneous gatherings occur, giving them the possibility to join in (see previous section). The central location of the common house relative to the site is seen as a way of achieving this. This measure cannot be applied directly to 'single-building' communities; as the common house is not a separate building. Instead, there are a number of shared areas usually located on the ground floor of the block of flats.
However, the principle of visual accessibility of these areas should still be valid, as it can enhance casual interactions between residents. This statement is supported by the research of Bouma, Poelman and Voorbij (2009). They consider the visibility of common areas as an important social design principle enhancing interactions in 'single-building' cohousing communities. Because of this, they conclude that technology could provide a substitute if physical constraints impede the visual access of common areas in 'single-building' cohousing:

"technology could be helpful in supporting the visibility of the common room. A possibility is to show people at the entrance if the common room is in use by someone or to notify dwellers in their apartment about activities in the common room" (Bouma, Poelman and Voorbij, 2009, p.8).

Looking at Palm-Linden's study on Swedish 'single-building' communities, the author emphasizes the importance of casual interactions, and the role of transition zones and entrance areas in achieving this (Palm-Linden, 1992). However, following her spatial analysis, the author makes no mention on the visibility of communal areas in Swedish cohousing for fostering social interaction. Supporting Bouma, Poelman and Voorbij' findings (see above), one knowledgeable Swedish respondent from this study also emphasized the efforts made in some Swedish 'single-building' cohousing communities to achieve a transparency of the communal areas. Some Swedish communities even use glazed walls in order to increase the visibility of communal areas (see physical design chapter for more details). This measure can be seen as an extrapolation of the striving for visibility of the common house in 'multi-building' communities. With this in mind, the lack of consideration on the visibility of communal areas can be seen as a limitation of the otherwise very impressive and important study of Palm-Linden on the physical design of cohousing.

In addition to this consideration, there are some limitations for two of the identified primary studies on the topic that need to be considered. Marcus (2000) concludes her paper with six tentative hypotheses regarding the influence of physical design on fostering a sense of community in cohousing. This is because the author remarks that her study
"was, in effect, a brief, 'journalistic' analysis of each community and does not pretend to be rigorous, survey research" (Marcus, 2000, p. 2).

As such, the scope of her study means that the findings are not definitive; a limitation compared to 'standard' research.

Another limitation can be noticed in Fromm's study (2000). The title itself- 'American cohousing: the first five years'- suggests the incipient nature of cohousing in North-America at the time of the study. The resulting limitation has been addressed earlier in this chapter when discussing the research of Jeske (1992) and Sullivan-Catlin (1998) on the topic of motivation in North-American cohousing.

Contributing to the body of knowledge by investigating the physical design of cohousing in both ‘single-’ and ‘multi- building’ communities

Despite their important contribution to the body of knowledge, none of the primary studies on the topic deals with both types of cohousing communities in terms of their built environment: ‘single-’ and ‘multi- building’ communities. The existing literature on the physical design of cohousing focuses mostly on ‘multi-building’ communities (Marcus, 2000; Fromm, 2000; Torres-Antonini, 2001; Williams, 2005b). The PhD of Palm-Linden is the only identified primary study that deals in detail with the design parameters of ‘single-building’ cohousing communities (Palm-Linden, 1992).

What can be deduced from the discussion of the last section is that the main principles behind the site design of ‘multi-building’ communities can still be valid in case of cohousing communities developed in blocks of flats. However, the main gap of the body of knowledge on the physical design of cohousing is that it does not examine this consideration in both ‘single-’ and ‘multi-dwelling’ cohousing. Therefore, a study looking at both these types would give a better overview on the physical design of cohousing in general. Because it would investigate the physical design in both ‘single-’ and ‘multi-building’ communities, it has the possibility to: identify a range of design measures applicable for one or the other situation; and reveal what concepts underpinning specific design measures can be
extrapolated between both types. In doing so, it can examine the issue (mentioned in the previous section) regarding the extrapolation of the design measure 'visibility of the common house/areas' to 'single-building' communities. This has not been addressed by the only identified primary study examining 'single-building' cohousing communities (Palm-Linden, 1992). In view of the main aim of this Thesis, the physical design chapter aims to address these considerations, thus hoping to contribute to the existing body of knowledge on cohousing.

**Contributing to the body of knowledge addressing the impact of the built environment on behaviour patterns**

In terms of wider contributions to knowledge, this study can contribute to the field of environment-behaviour. Environment-behaviour theories look at the links between the built environment and the behaviour of individuals (Torres-Antonini, 2001; Markus, Cameron, 2002; Bouma, Poelman, Voorbij, 2009). Torres-Antonini remarks that they

> “unfortunately have for the most part failed to engage widespread interest among the practitioners who are ultimately responsible for applying the findings” (Torres-Antonini, 2001, p. 58). As a consequence, “this approach has yet to become widespread among social scientists and environmental designers, these theories still seem to be an uneven body of knowledge” (ibid., p.66).

Therefore, a study that looks at the impact of the built environment on social interactions and the possibility for privacy in cohousing could contribute to that body of knowledge. In addition, the physical design chapter attempts to frame the findings from this study in view of environment-behaviour theories. More important for the current discussion, it uses innovative tools for the analysis: GIS software for the cross-sectional spatial analysis of the researched cohousing communities. This visual analysis is supplemented by semi-structured interviews with cohousing residents. Since the physical design of cohousing purposefully tries to enhance interaction, while also allowing for privacy when needed; it also presents importance for environmental-behaviour approaches that look at the link between the built environment and human behaviour patterns (see physical design analysis chapter).
5.2.4 The environmental sustainability of cohousing

Housing models that are more environmentally sustainable than mainstream options are promoted by North-West European (Brenton, 2001; Williams, 2005a; Cojan, 2013) and North-American countries (Meltzer, 2005; Williams, 2008), in view of the current sustainability issues faced by the globe. The early literature review, together with informal discussion with cohousing residents and professionals during the preliminary stage of this study, showcased cohousing as a potentially more environmentally sustainable option than mainstream housing. This can affect the long-term success of cohousing, by:

- reducing daily living costs due to lower energy requirements (Bamford, 2004; Williams, 2005a; Meltzer, 2005; Sundberg, 2014);
- enhancing the possibility to receive support from developers and authorities; given the wide-spread promotion of more sustainable lifestyles in the Western world (Brenton, 2001; Williams, 2005a; Williams, 2008; Cojan, 2013);
- increasing the personal well-being of residents due to a closer connection to nature (Sanguinetti, 2014).

The literature review on the environmental sustainability of cohousing revealed a number of recurring themes regarding the potential of cohousing communities for being more sustainable than mainstream housing. These are linked to environmental behaviour and resource consumption, and sharing among cohousing residents. Furthermore, existing studies mention a prevalence of ‘light green’ environmentalism in cohousing.

The literature review also highlighted a gap in the existing body of knowledge on the topic of environmental sustainability in cohousing, related to the research design of existing primary studies. These will be tackled in this section.
a) How the literature on the environmental sustainability of cohousing has informed this study

Resource consumption and environmental behaviour in cohousing

According to Williams, cohousing enhances the sharing of resources and the dissemination of pro-environmental ideals among residents (Williams, 2005a; Williams, 2005b). Her statement is “founded on the basic premise of economies of scale, sharing space, goods and services within larger households or between several households will reduce individual resource consumption in a community” (Williams, 2005a, p.159). As a result, her findings show that in US cohousing significant savings were achieved compared to mainstream averages:

“on average 31% space savings; 57% electricity savings and 8% goods savings were achieved” (Williams, 2008, p.273). This makes her conclude that cohousing “appears to be a more socially and environmentally form of housing” (Williams, 2005a, p.173).

Williams’ findings are echoed by Graham Meltzer’s work (Meltzer, 2000; Meltzer, 2005). He emphasizes that in cohousing, “there is opportunity for members with established environmental practices to influence others who are less committed” (Meltzer, 2005, p.130). This happens either informally, through discussions, or in a more formal manner, through leadership and education, highlighting the potential of cohousing for disseminating pro-environmental ideas and practices (ibid.). Furthermore, an increased peer-pressure can also lead to the adoption of pro-environmental behaviour among cohousing residents (Williams, 2008).

The research of Brown also looked at the potential of US cohousing in terms of environmental sustainability, comparing the gas and energy consumption in cohousing to the relevant US averages. Similarly to Meltzer and Williams, he concludes that the choices made by his two US case-studies "have helped to reduce their energy consumption trends when compared with the relevant national and regional averages" (Brown, 2004, p. 79). He further remarks that "the scope of cohousing communities provides for economies of scale in using technologies that may not be feasible elsewhere" (ibid.).
A more recent study on the resource use and associated carbon emissions in the Swedish senior cohousing community of Färdknäppen reveals that “household-related emissions are about a ton lower for a resident in Färdknäppen compared to a person living in a corresponding average conventional home, which is in the order of 20% less” (Sundberg, 2014, p. 57). Sundberg attributes such savings to lower energy needs for heating and electricity (mainly as a result of the smaller floor area of private households in Swedish cohousing, but also due to communal cooking) (ibid.); and goes on to suggest that “for a given standard of living, and standard of a home, cohousing will be more environmentally efficient than the corresponding conventional housing” (ibid.).

Sharing in cohousing

Jarvis considers that sharing in cohousing is dependent on three main factors: co-presence—the proximity of houses and the shared use of communal facilities; affiliation—the core values or ‘ethos’ of the group; and endeavour—the consequence of common activities and social interactions (Jarvis, 2015, p.98). According to Jo Williams, in cohousing

“the social dynamic between residents affects their ability to share resources within the community, which can lead to economic and environmental savings” (Williams, 2005b, p.222). In other words, “residents are also able to share resources in cohousing enabled by strong social networks and the provision of communal facilities/services” (Williams, 2005a, p.159).

Meltzer remarks that “there is enough evidence to suggest that the consumerist imperative that seems endemic in the West is significantly diffused in cohousing” (Meltzer, 2005, p.139); and the sharing of items, either informally or through a community-wide ‘item sharing system’, is credited as a factor in this regard (ibid.). The private ownership of washing machines, gardening and maintenance tools, freezers, tumble dryers and even second cars is reduced for cohousing residents, compared to their previous mainstream living settings; whereas the sharing of household goods is increased (Meltzer, 2005; Williams, 2008).
Lietaert is of the same opinion, mentioning that cohousing influences the consumption patterns of its residents towards more collective actions, which “not only enables people to save money and increase contacts with neighbours, but it also reduces the environmental footprint” (Lietaert, 2010, p.578). He mentions that sharing in cohousing is facilitated by ‘sharing systems’ for children’s clothes, household items, and smaller items “such as tools for gardening, maintenance, cleaning tools, cooking, small furniture, camping, etc.” (ibid); whereas car sharing and use of non-motorized transport modes is increased compared to mainstream settings (ibid.). The latter part is also expressed in the research undertaken by three Swedish students (Stratmann, Weiss-Ferreiro, Narayan, 2013).

‘Light green’ environmentalism prevalent in cohousing

While researching 50 US cohousing communities, Sargisson remarks that in the majority of cases residents are interested in environmental sustainability; however in a pragmatic, non-utopian way (Sargisson, 2010; Sargisson, 2012). This is contrary to other types of ‘deep green’ intentional communities such as ecovillages, characterized by “human-scaled […], harmlessly integrated with nature, supportive of healthy human development and sustainable” (Meltzer, 2010, p.105).

Cohousing communities usually adopt shallower, ‘light-green’ environmental stances, focused on conservation, low-impact build and sound use of resources (Fromm, 2000; Meltzer, 2000; Sargisson, 2012); compared to the ‘dark green’ ecological views (e.g. spiritual relationship with the Earth, celebrating ‘alternative’ rituals such as solstices etc.) prevalent in ecovillages, for example (Choi, Paulsson, 2011; Sargisson, 2012; Sanguinetti, 2014). This has been summarized by Ruiu, who considers that even in environmentally-oriented cohousing projects,

"not everyone has chosen to live in the community for environmental reasons: the environment is important for residents, but it does not represent the main reason for becoming a cohouser" (Ruiu, 2015, p.639).
b) Building the research knowledge - the contribution of this study

A review of the existing body of knowledge on the topic reveals one gap, in terms of the research design of identified primary studies on the topic. By helping to address this gap, this study seeks to bring an original contribution to the body of knowledge on the environmental sustainability of cohousing.

Considerations on the primary studies addressing the environmental sustainability of cohousing

Overall, the studies on the topic of environmental sustainability in cohousing can be divided into two categories:

- on one hand, there are studies looking at the potential of cohousing communities for being more environmentally sustainable than mainstream housing (Meltzer, 2000; Bamford, 2001; Meltzer, 2005; Williams, 2005a; Sundberg, 2014);

- on the other hand there are studies focusing on cohousing as a source of inspiration for more sustainable societies (Lietaert, 2010; Chatterton, 2013; Stratmann, Ferreiro, Narayan, 2013).

In line with the aim of this literature review chapter, the discussion will focus on the primary studies from the above first category. Their findings are based on quantitative techniques (surveys for Meltzer and Williams; system analysis for Sundberg), supplemented by interviews with cohousing residents.

Considerations on the findings from the primary studies on the topic: The findings of all three identified studies from this category come to similar conclusions. As the main findings are mostly based on quantitative evaluations of resource consumption in different cohousing communities from different parts of the globe, the numbers will differ between studies. For example,

- looking at US cohousing, Williams (2005a; 2008) concludes that cohousing residents use about half the electricity and about two thirds the space of US mainstream housing;
- looking at Swedish cohousing, Sundberg (2014) concludes that cohousing residents use with one fifth less energy than Swedish mainstream housing;

- looking at North-American and Pacific region cohousing, Meltzer (2000; 2005) notices an overall reduction in privately owned white goods (with one quarter), gardening tools (with up to three quarters) and second cars (slight reduction) in cohousing compared to US mainstream averages.

Perhaps more important than the actual numbers is that they come to similar conclusions regarding the reasons as to why cohousing can be more environmentally sustainable than mainstream settings. For example,

- all three authors mentioned above agree that the communal activities and facilities lead to lower resource use;

- all three authors agree that the cohousing setting allows for an easier diffusion of pro-environmental ideas and practices due to the higher interactions between neighbours;

- all three authors mention the lower floor space of private houses as a reason for lower resource consumption (due to lower needs for heating/electricity);

- Both Williams (2005a) and Meltzer (2000; 2005) mention that sharing in cohousing is higher than in mainstream settings, which leads to lower resource consumption;

- Both Meltzer (2000; 2005) and Sundberg (2014) mention that the amount of recycling is higher in cohousing compared to mainstream settings.

As such, it can be stated that the identified primary studies on the topic come to similar conclusions as to why cohousing has the capacity to be more environmentally sustainable than mainstream settings. It must be further noted that from all these three studies, Meltzer's PhD (2005) is the only one with a wider focus in terms of the link between cohousing and environmental sustainability. Using the numerical data from his studies and the community empowerment model as a theoretical framework, the author concludes that the environmental sustainability of cohousing is dependent on the social cohesion of the group (Meltzer, 2005).
Considerations on the limitations of the primary studies on the topic: In addition to considerations regarding the findings, a limitation from one of the aforementioned primary studies must be considered before proceeding with the discussion on the gap in the body of knowledge (and how it has shaped this research).

Williams' conclusions in terms of the environmental sustainability of cohousing are based on an earlier research undertaken by the author in 2003 (see: Williams, 2005a; Williams, 2006). The issue is that the respective work was not published; and the wider focus of her papers from 2005 and 2008 (that look at different aspects and contexts for cohousing) means that no details are given as to how the author has come to her results. In fact, all her papers that mention to a higher or lower extent the environmental sustainability of cohousing (Williams, 2005a; Williams, 2006; Williams, 2008) reference her unpublished 2003 study as a source. As such, it is not possible to examine the process that lead to her widely-cited numerical data; or make any remarks regarding the statistical significance of the findings. For example, in a similar study on the topic of the environmental sustainability of US cohousing, the author discusses the research design at the beginning of his paper (Meltzer, 2000). He remarks that "in total, 346 surveys were returned, representing about 86% of occupied households and 84% of residents" from 18 (out of the 22 already formed) US cohousing communities at the time of his study (Meltzer, 2000, p. 2). Even such a short description can give an overall impression on the important scope and significance of his study, judging from the number of case-studies (relative to the total at that time) and high response rate.

To conclude this discussion, the value of Williams research for the body of knowledge on cohousing is high, considering: how often her work has been cited by other authors; and how important it was in informing different aspects of this study. Furthermore, her work is among the most cited in this study. As such, giving the readers more evidence on the data behind her findings on the environmental sustainability of cohousing can only add to the (already high) value of her research.
Contributing to the body of knowledge in terms of research design
Among the body of knowledge on the topic of environmental sustainability of cohousing, a gap can be noticed in terms of their research design. The studies of Meltzer (2000, 2005), Williams (2005a, 2008), and Sundberg (2014) are very important for the topic because of the numerical evidence and underpinning considerations they provide. However, in terms of the body of knowledge, most of the data comes from non-European (mostly North-American) case-examples (Meltzer and Williams' work). This raises questions of whether the findings are similar or not in the European context.

Sundberg’s research can be seen as a step for bridging this gap, as his study is focused on the environmental sustainability of a senior Swedish cohousing community (Sundberg, 2014). However, his findings are limited to the respective case; and might not be applicable for different types of European cohousing, or different circumstances. This is where a cross-sectional study can be of use.

Therefore, a study focused on North-West European cohousing communities could provide a viable comparison between the positive outcomes of William’s and Meltzer’s research (on resource use and energy consumption in non-European cohousing) and European cohousing. A cross-sectional approach could put Sundberg’s sustainability findings from a Swedish community in perspective. Furthermore, it must be mentioned that the qualitative nature of this study (determined by its main aim) looks to build upon the aforementioned primarily quantitative studies through the accounts of residents living in cohousing communities.
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Figure 6: How the gaps in the knowledgebase on cohousing provide a rationale for the research questions and design of this study. Source: Author, 2016.
5.3 Conclusions of the chapter

The aim of this chapter has been to discuss how existing research informs this study; and more importantly, how its research focus and design was influenced by the gaps in the body of knowledge. Figure 6 is a visual representation of the main considerations discussed in this chapter.

Overall, the main findings are remarkably similar between the identified primary studies for all of the four themes. The literature mentions some common characteristics of cohousing communities across the world (see context chapter of this Thesis), which could explain to some extents the similarities in findings between studies. The other explanation can be attributed to the general scarcity of primary research on cohousing. As more primary studies looking at the different types, contexts for development, and multitude of aspects that characterize cohousing emerge, variation and even contradictions between their findings are possible.

While reviewing the literature, some limitations of the primary studies became apparent. The limitations of the identified primary studies can be divided into two categories:

- **limitations in terms of research design**: lack of longitudinal perspective for many US studies dealing with the motivation and physical design of cohousing; lack of details regarding the sample size of some studies (in the case of quantitative studies, their statistical significance cannot be deduced); lack of evidence for Williams’ classification of cohousing development models, and for her numerical data on the environmental sustainability of cohousing.

- **limitations in terms of some of their findings**: ‘the visibility of common areas’ as a design measure enhancing interactions is overlooked in Palm-Linden’s work on ‘single-building’ cohousing.

The main limitations of the identified primary studies, coupled with their focus, leave gaps in the knowledge and understanding of cohousing. As a consequence, this study aims to contribute to the knowledge base on cohousing by addressing gaps in terms of focus and research design of existing literature.
In terms of research design, this study aims to contribute to the knowledgebase by: giving a longitudinal perspective lacking in studies on motivation (Jeske, 1992; Sullivan-Catlin, 1998) or physical design (Fromm, 2000) from 'incipient' North-American communities; giving a broader, cross-sectional perspective to findings from studies focused on a single case-example (Torres-Antonini, 2001; Sundberg, 2014; Ruiu, 2015; Scanlon, Fernandez, 2015); analysing the physical design of both ‘single-‘and ‘multi-building’ cohousing; and adding qualitative insights to existing quantitative research on the environmental sustainability of cohousing.

In terms of focus, this study aims to contribute to the knowledgebase by exploring: the potential link between motivation, on one hand, and cohesiveness and continuity, on the other; and the outcome and long-term influence of the different models for development on the long-term success of cohousing.
6) How the motivation of residents affects the long-term success of North-West European cohousing

![Graphic representation of the constituent elements of a cohesive NWE cohousing project (the 'triangle model'). Source: Author, 2015.](image)

Preliminary research undertaken during the first year of this study, together with the review of relevant literature, highlight motivation as an important factor shaping cohousing. However, there is a scarcity of primary research regarding the motives of individuals for participating in cohousing. Even more so, there is a lack of research regarding the motives for participation as an influencing factor for the long-term success (cohesiveness and continuity) of cohousing communities. In view of the main aim of this Thesis (determining factors that influence the long-term success of cohousing), this chapter sets out to help fill this gap in literature. It uses information gained from in-depth, semi-structured interviews with 46 participants from 16 cohousing communities across North-Western Europe (in Sweden, Denmark, the Netherlands and the UK). Three research questions related to the topic of motivation among cohousing residents will be discussed:

1) **What motivates people to participate in cohousing?**
2) **How do the main motives for participation affect the long-term success of cohousing communities?**
3) **Can the impact of conflicting motivational priorities in cohousing be lessened?**
Therefore, this chapter will be divided into four main sections. The first one will discuss the primary and secondary motives mentioned by interviewees for participating in cohousing.

The second section will discuss how the main motive for participation mentioned by most interviewees (having an enhanced sense of community; while retaining the possibility for privacy) affects the long-term success of the studied communities. The findings reveal that this main motive leads to higher levels of interactions and participation compared to mainstream settings; however at the same time the striving for balance between community and private life usually results in a lack of formal support structures. As such, these higher levels of interaction and participation are a requirement for developing trust, reciprocity and bonds among cohousing neighbours. Without the latter, social and practical expectations from cohousing could not be realised. Furthermore, this striving for balance also means that people with high expectations regarding the levels of support in cohousing will be left disappointed.

The third main section will discuss how the main motive for participation mentioned by a minority of interviewees (material considerations) can negatively affect the long-term success of the studied communities. The fourth main section will examine two practices aimed at lessening the impact of conflicting motivational priorities that can arise during the lifespan of a cohousing community (third research question of this chapter); whereas the fifth one will present the conclusions of this chapter.
6.1 Motives for participating in cohousing

The first step for answering questions regarding the impact of motivation on long-term success of cohousing is to find out the motivating factors (for the 46 participants of this study) for engaging in cohousing. Therefore, this section aims to answer the first research question. The data analysis reveals two primary categories of such motives, one of which was mentioned by the vast majority of interviewees; and four additional categories (see figure 7). These will be discussed in this section.

It must be further mentioned that motives for participation of individuals are mixed; and more motives than the ones mentioned during interviews might be accountable for their decision. The following discussions is based on the emerging patterns following the analysis of data.

6.1.1 Primary motives for participating in cohousing

Interviewees mention two main motives for their participation in cohousing, both of which will be discussed in this section:

- the opportunity to recreate a sense of community; while also maintaining personal privacy (mentioned as the primary motive for participation by 41 of the 46 interviewees);
- practical considerations for living in cohousing (mentioned as the primary motive for participation by 5 of the 46 interviewees).

a) The opportunity to recreate a sense of community, while also maintaining personal privacy

No fewer than 41 interviewees (ex 46) mention the need for an enhanced social life in a setting that also allows for personal privacy, as their main determinant for living in cohousing. Interviewees consider it as getting the best of both worlds; as it combines the social advantages of life in a ‘close-knit’ community with the possibility for choosing privacy more or less for as long as one wishes (with the exception of compulsory task for the
community, such as taking part in maintenance or cooking as part of a larger team once every few weeks).

According to a Danish interviewee, "this balance between private and common is very important; [...] not only in regards to the architecture of the buildings, but also regarding the life of the community itself" (Interview with L.A., 2014). Another interviewee (from a different community) adds that their private homes have all the functions existing in mainstream housing, plus the advantages of an enriched social life (Interview with J.G., 2014).

For another interviewee, this represents the crux and main attraction of the cohousing model:

“if you someday don't want to socialise, you can go home. So you have your privacy. The pretty good thing about it is that you can have your privacy, when you want; and be social, when you want” (Interview with H.J., 2014).

The same reasoning is given by another Danish interviewee (from a different community), who mentions that in their case,
"you want to interact with your neighbours, you want to have something together with them; but you also want your private life, [so that] we don't sort of totally run into each other's houses all the time" (Interview with N.L., 2014).

In order to have this possibility for privacy, all cohousing residents have their own flats/houses. One Dutch interviewee mentions that their houses have all the amenities found in mainstream settings, meaning that privacy can be a choice, whenever needed:

“basically […] quite similar to the street across from us; it is that we also have the opportunity to join group activities and use common facilities” (Interview with M.H., 2014).

Therefore, as a cohousing resident “you can always go back, close the door and be on your own” (ibid.); thus having the possibility to choose when to socialize with your neighbours and when to spend time on your own:

“I always say that you are never alone over here, if you don't want to! Or you never have to be alone. You can be on your own, if you want to, that is not a problem over here; but that is what attracts me as well. Because I like to be alone sometimes, or most of the times actually, but I don't want to be alone all the time. And I can pick my own moments, so that is very good” (Interview with J.W., 2014).

This view is echoed by a Swedish interviewee who highlights that "if you are alone, it means that you have chosen it yourself" (Interview with A.D., 2014); and goes on to further emphasize the difference between being forced to be alone and selecting it yourself (ibid). Along the same lines, for one UK interviewee cohousing proved to be the most desirable setting to live, due to “that combination of shared common spaces and activities, with the access to our own private lives” (Interview with M.S., 2014). In his view, cohousing embodies the balance between an enhanced sense of community (compared to mainstream settings) and personal privacy:
"Cohousing is the ideal halfway setting between those, we got all the common activities and the common responsibility, but we got our own front doors and our kitchen; we can stay in our private house as long as we want" (Interview with M.S., 2014).

Or, in the words of another UK interviewee,

"I like living communally, but I would like my own privacy as well! So I can eat with people, be with people, but also be able to say: That's it!" (Interview with N.S., 2014)

Nine interviewees have additionally mentioned the conditions of social isolation and estrangement experienced by them in traditional settings as a reason for their decision to live in cohousing. One Danish interviewee remarks that among members of his community, "the fear of living with neighbours that you are estranged from" was predominant (Interview with T.G., 2014). Similarly, another Danish interviewee (from a different community) indicates that in the apartment where she and her husband lived before, they

"did not know the people who lived in the same building with us, we just knew two or three of them". Their choice for moving into cohousing was "a reaction against that, as we didn't have any social interaction with the people around us" (Interview with N.L., 2014).

She attributes this lack of interaction with their neighbours in their previous mainstream living setting to the conditions of modern urban life, characterized by individuality and estrangement:

"I think the fact that we talk too little with our neighbours, living in cities in flats in the same building with other people, and you hardly speak with them. So it is about social isolation. I think for me it is more a reaction to all these people living in houses, where like- 'this is my spot and this is your spot' and we are not allowed to cross them" (Interview with N.L., 2014).

Therefore, she and her husband had to actively seek out a more community-based environment. A comparable situation was encountered by a Dutch interviewee, who in her
prior setting "had a bit of contact with the neighbours, but not much"; whereas in her cohousing community "you know the face of everyone, and some people you know better, and some you don’t" (Interview with J.R., 2014). Breaking the isolation experienced in city life has been a key motive for participation for another Swedish interviewee (Interview with R.P., 2014); whereas a UK cohousing resident mentions that contrary to the experience of his close friends, in his community there is no need to feel isolated at all:

“So I know friends, they are maybe in their 30s, they live a long way from their family, they’ve got a job so they live a long way from university friends, they live in an anonymous house in an anonymous suburb, and they have children. Normally, the guy goes back to work after a few days, and the wife is left isolated. And that might be like for one year, or two years. Whereas here, there are people all the time knocking on your door” (Interview with M.C., 2014).

This advantage is especially important for interviewees in their second half of life living in senior cohousing communities, as directly mentioned by six out of nine such interviewees. Furthermore, it is in agreement with previous studies who mention the theoretical benefits of cohousing in terms of combating issues such as loneliness and social isolation, to which elderly people are especially vulnerable (Brenton, 2001; Choi, 2004; Brenton, 2013).

b) Practical considerations
Practical considerations were indicated as a main motive for participating in cohousing by five participants. They were motivated by better housing conditions and by easier opportunities for increasing their own social network after moving to a new location. A further 17 interviewees primarily motivated by the ‘best of both worlds’ concept mention practical considerations as an additional reason for living in cohousing. Three important categories of practical motivational determinants for North-West European cohousing residents emerge as a result of the data analysis from this study: receiving instrumental help...
due to support networks; access to better housing; and the possibility to increase one's social circle when moving to a location.

Receiving instrumental help due to support networks

Eleven interviewees mentioned the existence of support networks in their community as an important motivating factor: "some people say that this is the way to live in the future, in some ways; as it also gives you a huge network" (Interview with J.L., 2014). Support resulting from such networks can come either in form of practical arrangements, such as sharing tools or lending items; or in form of easier access to people with different skills (compared to mainstream settings). They are the result of the interactions and bonds developed in a cohousing setting, which will be discussed in the next section of this chapter.

In regards to the sharing of tools, one Danish interviewee confesses that "the amount of tools and other items that is circulating in this community is probably enormous" (Interview with T.A., 2014). He goes on to compare their community (where gardening tools are shared among all the residents) with the standard neighbourhood adjacent to it. In case of the latter, despite the similar size of the houses and the reduced size of the gardens, individual gardening tools can be found in each property (ibid.). This is considered to be a waste of resources and space compared to the cohousing setting (ibid.).

An interviewee from a different community further emphasizes the importance of sharing in cohousing communities, mentioning it as a motivating factor for him and his wife. Contrary to their previous mainstream experience, he was attracted by

"having shared resources that you can share with each other; for example sometimes in the morning we forget to buy milk or some other stuff, and we just go around and knock on neighbour's doors to ask and stuff like that" (Interview with J.L., 2014).

Another practical advantage of living in cohousing is the possibility to use the communal facilities of the community, and make use of economy of scale for lower overall costs:
“we can share resources and facilities, to have a cinema, to have a sauna and all other different things we have in common. Some of our neighbours actually have a boat, and they have bought a boat together, you wouldn't do that normally on your own. When you are lots of people like this, it is much easier to do it, apart from the costs, the services and maintenance are a big pain in the neck, so here you can share those as well” (Interview with J.L., 2014).

Furthermore, four interviewees also mention that they were motivated by the fact that cohousing provides them with easier access to people with different skills/knowledge in certain areas, due to the closer bonds between residents resulting from the interactions within the community. According to one such interviewee,

"there is probably not a thing you couldn't knock on the door of a neighbour and ask help [...] you can always find someone who can help you out with whatever problem you have" (Interview with T.A., 2014).

Such help can come in form of

“cooking certain types of food, or with gardening, or with do-it-yourself projects; or for example we have a guy here who is working in a bank, you can just casually ask him about information and so on" (Interview with L.L., 2014).

This large network means that one can always ask people or reflect with them on certain issues; such as being more environmentally responsible in terms of waste (Interview with J.L., 2014).
**Access to better housing**

A total of eight interviewees mentioned access to better housing as a motivational determinant for them. For half of them such a material consideration was the primary reason for participating in cohousing; whereas the other half mentioned it as a secondary motive.

Better housing can take the form of:

- access to a better location, which can be an especially important factor in urban agglomerations such as Stockholm, as revealed by two Swedish interviewees. According to one of them, the location of the community was a primary reason for engaging in his community:

  “it is a nice area, close to the water, you can see the boats passing by, and also it is very close to the city centre. You can even bike from here to the other side of the town, Stockholm is not very big. I mean its inner-city; it takes no more than half an hour from one point of the inner city to the other. It is very convenient, in fact” (Interview with O.U., 2014);

- possibility to live in a rural area, a more favoured living environment for a Danish and UK interviewee. According to one of them, he enjoys

  “living in the country, it is quite quiet here; the only downside is the local facilities, like cinema. I like living in the rural area anyways, it is quite nice, it is a positive point” (Interview with C.T., 2014).

- and especially access to better quality/price value for houses compared to mainstream norms, as indicated by four other interviewees. For a Dutch cohousing resident who had just moved in with her family in a new city,

  "it was the price of the house that attracted us, along with the garden straight at the door" (Interview with M.H., 2014).
Even though they had doubts about moving into an intentional community at first; the low price of the house, the safe playground, and the large, central garden made them consider the move. They decided to get more information and came to the conclusion that for them this type of community “is perfect, it is not like in a community as in sex or a cult, it is not anything like that” (ibid.).

Another interviewee was motivated by a similar reason, mentioned access to better housing (compared to his mainstream options) as a primary reason for participating in cohousing:

“I came here, and the most appealing for me was the big garden and the location near the water. That was for me the reason why I wanted to live in this house and then I learnt the fact that the community had a separate building that you could use as an extension of your own house, if you have parties or something like that” (Interview with V.H., 2014).

Yet another interviewee mentions that the she could get a better quality for price ratio for her flat, due to the social status of her cohousing community (it is considered as a social project by the landlord, and all the flats are rented on more affordable terms compared to standard options). This was a primary reason for her engagement in cohousing:

“it is not so easy to find an apartment in [her current city], at least it is not so easy to find a cheap apartment over here. Because in the Netherlands, for social housing you have to usually be on a waiting list for quite a while, which I wasn't. [...] I could rent in the private sector, but there the rents are much higher” (Interview with A.W., 2014).

The easy possibility to increase one's social circle when moving in a new location
Five interviewees, who recently moved in new cities/towns, mentioned that they were motivated to participate in cohousing because it allows them to easily increase their social circle. For one, this was a primary motive for participating in cohousing; whereas for the other four it was a secondary motive.
Increasing their social circle is especially important for individuals who have recently moved in a new city or town. An easier access to various friends and contacts of their fellow neighbours allows them to make new acquaintances much faster, thus increasing their social network. Such an advantage is deemed particularly important by a Dutch interviewee, who mentions that

“I never lived in [his current city] before, but I worked here, and for a single person, a little bit older, it is an easy way to meet new people; because everybody in this block knows each other and we meet each other almost every Friday. [...] They also introduce you to other people and they explain to you how it is to live in this city and how you can find things and so on” (Interview with V.H., 2014).

His view is echoed by another Dutch interviewee (from a different community), who remarks that she didn't know anyone in her new city when she moved in; and as such a cohousing community seemed an easy way for meeting new people:

“I think I was interested mostly because I didn't know anyone in [her current city]. And it seemed a good opportunity to get to know some people and not feel totally lonely in a strange city” (Interview with A.W., 2014).

Similarly, one of her neighbours states that he is further motivated by the possibility to faster extend his social network in a new city:

“you are able to meet the friends of the people living here; it extends your network faster, if you come to a new place. If you have parties, you're also likely to meet friends of people that you already know” (Interview with H.W., 2014).
6.1.2 Additional motives for participating in cohousing

The data analysis reveals four further categories of motives, besides the primary ones, for the participation of individuals in cohousing. These are: enhanced opportunities for self-development; support for the raising of children; and other considerations (emotional support; ecological considerations; avoiding the limitations of other communal arrangements). They will be discussed in this section.

a) Enhanced opportunities for self-development

Less than half of the interviewees (20 ex 46) have mentioned that the cohousing environment aids them in their self-development journey; mainly due to two considerations: the requirement for reaching common solutions; and a more positive setting (than the mainstream environment) towards self-development.

The requirement for reaching common solutions

Eleven interviewees mention that the setting requires of them to work together with people that might have different perceptions, opinions, and/or personality than those of their own, in order to reach common solutions demanded by life in an intentional community. Self-managing the community means that residents have to take various decisions that impact everyday life. These range from issues that demand important financial contribution (maintenance requirements, installing alternative heating and energy systems etc.), to issues that can significantly impact the lifestyle of the residents (frequency of common activities; amount of work required for community purposes, ‘pet' policy etc.). As such, conflicting views and opinions are not at all uncommon, being characteristic to all the studied communities (and according to the literature, to all studied non-hierarchical intentional communities). They require energy, commitment and sometimes skill to solve. Nonetheless, by having to reach common solutions and agreements that affect life in the entire community, interviewees mention that they not only learn how to better communicate and handle in certain situations, but also how to be more flexible and take other people's views and proposals into account.
This situation is best exemplified by a Danish interviewee mentioning that

"there are some people here with whom I get along very well in some situations; and in some other situations like for example in the common meetings, I think they are complete pricks" (Interview with S.B., 2014).

However, she mentions that it is this exact aspect that contributes to her self-growth, "because other people have different opinions, and that is very irritating, but you have to make it work" (Interview with S.B., 2014). A member of the same community agrees with this remark, adding that for some individuals reaching decisions can sometimes be quite difficult, as they have to

"both bring their own opinion and listen to other people's opinions; maybe even change their own opinion a little bit, if they hear good arguments" (Interview with H.B., 2014). Nonetheless, he mentions that exactly due to this fact, "there is an element of personal development in living here" (Interview with H.B., 2014).

This point of view is echoed by the three interviewees of a senior Dutch cohousing community. One of them mentions that in their setting they have fostered the values of flexibility and patience, as "you cannot change [things] easily or do it in your own way" (Interview with M.K., 2014). Similarly, a Swedish cohousing resident remarks that "it is not simple every time, but it is very useful [having] to deal with conflicts more than usual, because you live so close to the others" (Interview with A.D., 2014). Such challenges tend to reveal aspects of one's personality and highlight its traits:

"I think that something happens to you as a person when you are living so close with your neighbours. You can discover both the bad and the good sides of yourself, because you are being tested more" (Interview with A.D., 2014).

In consent with this statement, a former board member of another Swedish community relates how their initial proposals were strongly opposed by some other residents; however when
"I started to think about what some of the others had said, I realised I hadn't thought that proposal out" (Interview with T.P., 2014). He goes on to further mention how this lesson contributed to his self-growth, as he had to "rethink all of it [...] and it made me become humble" (Interview with T.P., 2014).

A more positive setting towards self-development

Six interviewees mention that their cohousing community represents an opportunity in which they can express their identity in a more positive (tolerant and understanding) setting compared to their workplace, for instance. One UK interviewee specifically mentions that she is a person who likes to meditate, and people would look at her in a strange, prejudicial way at her workplace (Interview with B.T., 2014). In her community, she finds understanding and to a certain extent similarity of spiritual beliefs with some of her neighbours (Interview with B.T., 2014). Because of this, she feels encouraged to practice and share her spiritual interest (Interview with B.T., 2014). Her view is echoed by one of her neighbours, who mentions that having people around with similar spiritual backgrounds represents an important boost for him:

"there were people here who seemed to be on a similar spiritual path, they were into interpersonal development, so it was an easy group to integrate with it" (Interview with A.T., 2014).

Spiritual values aside, interviewees consider that cohousing represents an environment where individuals can express their identity and their interests in a different manner compared to how they do at work:

"in ‘normal’ life, the thing that everybody has got in common is work, everybody works; so usually conversations revolving around your job: 'I had a bad week' or 'this is what I do for work'; while we all share living here, so we have this really strong topic of conversation available to all of us. We share something that is really potent, we are all doing something together, that is really powerful; something that has a lot of impact on my day-to-day life, I am sharing with 60 other adults, so I think knowing that
One Danish interviewee agrees, remarking how cohousing gives him the possibility for expressing himself around other adults in a different manner than how he does at work:

"nowadays it happens that after dinner, we spent some time up here [in the common house] and talk. So sometimes we just keep hanging after dinner around here and talk; not every day, but sometimes. For half an hour maybe; but as an adult it is very nice to do that. Because a lot of us have a certain identity at work, and here we are not in our work circle, we are just the people living here. So I feel sometimes very nice not to be my 'working-self' around adults all the time, in order to avoid having the same role all the time" (Interview with L.A., 2014).

This view is confirmed by another Danish interviewee (from a different community), who states that he feels motivated by the fact that in his community "there are people around you and you can talk with them about everything, not just about work" (Interview with H.J., 2014).

b) Support for the raising of children

The analysis of data from this study reveals that support for the raising of children represents an important motivational determinant for North-West European cohousing residents. Less than half of the interviewees (21 ex 46) consider that the setting offers better support for parents compared to mainstream settings, due to three circumstances: receiving informal help with babysitting; receiving help with picking up children from school; and the possibility of spending more quality time with children due to the common meal system.

Furthermore, data analysis from this study reveals that 20 interviewees (ex 46), all living in intergenerational cohousing communities, feel motivated to participate because cohousing represents a more positive environment for children to grow up in (compared to mainstream
settings). They give three arguments for this: cohousing represents a more secure environment for growing up children; children have an easier access to peers; cohousing contributes to the self-development of children.

**Cohousing offers better support for parents, compared to mainstream settings**

Receiving informal help with babysitting: Fourteen interviewees mention the easiness in terms of receiving help with babysitting/child-care in their community, on an informal basis. This is due to the frequent interactions, resulting bonds, and physical proximity of individual households in North-West European cohousing.

According to a Danish interviewee, living in cohousing represents a big help for parents with children, because their "kids spend so much time with other people and there are many babysitters around here" (Interview with S.B., 2014). Another Danish interviewee (from a different community) agrees, mentioning that it is much easier to ask their neighbours for help with child-care than it was while living in a traditional setting (Interview with N.L., 2014). She remarks that in one instance,

"when I was cooking in the kitchen and [her husband] was not home yet, I put the three kids in two different places and it was kind of no problem, actually" (Interview with N.L., 2014); a feat almost unimaginable for her if they would have still lived in a standard urban setting.

Likewise, a Dutch interviewee regards the help with child-care received while living in cohousing as an important motivational determinant for him. He highlights the difference with mainstream living arrangements:

"in a common street [...] you have to sit at home, [...] or you have to put the kids in the kindergarten, and that costs a lot of money in Holland" (Interview with E.H., 2014); whereas in his cohousing community, "you can use the common house to put all the children together, so that the other adults are free to go, [...] for shopping, for schooling, for working, for whatever they want" (Interview with E.H., 2014).
Further strengthening this point, a Swedish interviewee gives the example of her son living in a mainstream setting in Sweden, where "they don't have these close bonds; even if he is a very social person, such bonds don't exist normally" (Interview with D.P, 2014). Consequently, he has to ask his parents for help with babysitting; whereas in their cohousing community finding such help would be much easier and much more natural, because especially "young people with small children, they help each other with babysitting and so on" (Interview with D.P, 2014).

In the UK as well, interviewees mention the advantages derived from living in cohousing in terms of help with child-care. This represents an important motivation for parents, as they

"don't need babysitters because the neighbours do it; [...] so people save money on childcare" (Interview with M.C., 2014).

Receiving help with picking up children from school: Nine interviewees mention that the bonds developed in North-West European cohousing allows them to receive help with the journeys of their children to and from kindergarten or school. Given the physical proximity of households in the studied communities,

"if you are stuck in the train [from work] and you can't really make it; you can just call someone from the community and ask them to pick up your child" (Interview with M.G., 2014).

A similar experience is recalled by another interviewee, who mentions that

"in the evening we were working up until 5:30 or 6 o'clock; and some of our neighbours picked up our children from school or from kindergarten" (Interview with M.J., 2014).

The ease of receiving such help in their community was an important motivational factor for her and her husband (Interview with J.J., 2014). A fellow neighbour adds that such assistance is much easier in a cohousing setting; "if you would have lived in another place, it would not have been so easy" (Interview with H.J., 2014).
The possibility of spending more quality time with children due to the common meal system: Five interviewees mention that they were motivated by the possibility to spend quality time with their children in the late afternoon, by not having to prepare dinner every day. The common meal system central to most studied cohousing communities means that residents are free to go and enjoy common meals for a number of times before their turn for preparing said meals comes. Such frequency depends on the size of the community and the amount of common meals per week. In communities with over 50 people and a minimum of four common meals per week (the norm for over half of the studied communities) it means that an individual can participate in up to 20 or 25 such meals until their turn comes.

This system means that parents working full-time are usually relieved from the duty of shopping and preparing the dinner daily. This allows them to spend more quality time with their kids in the afternoon, before putting them to bed. According to one interviewee, mother of two,

"the time from when you get home until you eat, that might actually be the most stressful times for most families with children; [...] because you have to shop and to cook and the children are hungry and tired" (Interview with L.L., 2014). But living in cohousing means that for them, it is one of the most 'peaceful' times (Interview with L.L., 2014).

As one Danish interviewee further highlights, if

"you come home and you start cooking food, that is not quality time to spend with your kids" (Interview with J.L., 2014). But due to the common meal system, "now that you don't have to worry about that, about cooking or washing-up dishes or anything else like that; we can spend quality time together" (Interview with J.L., 2014).

A similar argument has been given by an interviewee from another Danish cohousing community, who mentions that
"being allowed to play with your children from 5 to 6 in the afternoon, when you normally would run around cooking and everything would be chaos; that was quite important" (Interview with J.J., 2014).

Cohousing: a more positive environment for children, compared to mainstream settings

A more secure environment for growing up children: Twelve interviewees indicate that they feel more secure knowing that their children are growing up in a cohousing environment. That is because of two key considerations. The design aimed at fostering social interaction (more details in the physical design data chapter) witnessed in all but one of the studied communities means that cars are parked at the edge of the site. This allows for more space for pedestrian pathways, green areas and playgrounds compared to traditional developments. Such design measures have been mentioned by interviewees as being extremely helpful for parents and children alike. This is because they allow children to roam freely on the premises of the community, without the need for constant supervision from their parents. One mother of two mentions that her children

"like their freedom to just walk out the door […], to just go out and play" (Interview with M.H., 2014); an experience contrary to traditional urban settings, where "you always have to go with the child, and to watch out" (ibid.).

On a similar note, another interviewee refers to the more 'free and unsupervised life' of his children: compared to living in standard settings, they don't have to worry all the time about cars (Interview with T.A., 2014). Besides the physical design, interviewees feel motivated because their children can trust and, in case of need, ask for assistance and help from the other adults of the community. This is made possible especially by the frequent interactions and resulting bonds developed by living in cohousing. This has implications for the interviewed parents, as they do not feel the need to supervise their children all the time, contrary to their experience of modern urban society. As one such interviewee mentions,

"the big difference is that for most parents today, they want to know all the time where their kids are; and here it is more like in the old days, when the kids knew where the
adults were, they knew where to go in case they needed someone” (Interview with T.G., 2014).

This is possible because in a cohousing setting people know each other (ibid.) and children learn to trust the other adults from the community. As another interviewee emphasises,

"at least my children, they feel safe here and they learn to trust people; you just tell them to go over there [to a neighbour] if they need any help" (Interview with L.A., 2014).

Interviewees feel that contrary to contemporary experience from urban settlements, where some parents feel the need to supervise their children 24/7 (Interview with T.G., 2014); children in North-West European cohousing

"wouldn't be afraid to go to any house here and knock on the door and say: my parents are home late, can you help me with so and so?" (Interview with M.G., 2014); and as a consequence they "learn something about trusting each other" (Interview with L.A., 2014).

An UK interviewee further highlights the difference between children growing up in cohousing and the ones that grow up in a traditional setting:

"the development of the children here is really different; all the kids think it's perfectly normal to go to anybody’s house, to spend time with anybody, to talk to anybody, to ask adults for help" (Interview with M.C., 2014).

Consequently, some actually view cohousing as reminiscent of the tight knit communities of old, where children had a secure environment, "surrounded by adults with whom they felt secure and they could trust" (Interview with J.G., 2014).
Children have an easier access to peers: Twelve interviewees emphasize that their children enjoy living in cohousing, due to: the easiness of getting to know and play with their peers; and the access to children's facilities. According to one Danish interviewee, her children love their life in cohousing; "especially the older one, he is almost 4 and he calls one of the other kids his big brother and he runs around and so on" (Interview with S.B., 2014). Another interviewee, parent of two, agrees; remarking however that the different personalities of his two children led to different results:

the younger one "is having the time of his life, always running around between houses, and no problems finding friends; [...] if the 'main guy' is not at home, you always go to number two, or number three, or number four, you always find somebody to play with" (Interview with J.G., 2014).

The older one finds it a bit more difficult, "because of his personality and also because this way of living exposes his awkwardness" (ibid.). Nonetheless, individual personality permitting, the setting makes it easier and safer for children to make friends (Interview with L.L., 2014). As concluded by one Danish interviewee:

"my son is not even six years old, and he can come back home from school by himself, [...] and he can go to his friends by himself; [...] because being so many children here, they play a lot and they can get help from anybody. It's perfect!" (Interview with L.L., 2014).

One Swedish interviewee (who shares custody of his children with his ex-wife) highlights what he perceives to be the difference between cohousing and a standard setting for his daughter:

"my ex-wife, she lives in an apartment close nearby, so our daughter knows what it is like [to live in a mainstream environment; [...] she knows that it is not as social as this [in their cohousing community] everywhere, she has a lot of friends over here and she likes it" (Interview with R.P., 2014).
Cohousing contributes to the self-development of children: Five interviewees mention that the cohousing setting contributes to the development and growth of their children, by teaching them values such as trust, cooperation and responsibility. In some of the intergenerational communities from this study, the children over a certain age are given certain responsibilities: taking part in the preparation of communal meals, taking part in various group activities and working days etc. As one Dutch interviewee and father of two states, children growing up in his cohousing community had to communicate and cooperate with their peers and other adults from a young age:

"I see it with my youngest daughter, if they have a debate at school, she is very clever in finding the arguments for the debate; and they learned it here, with other children, to deal with each other" (Interview with E.H., 2014). If she "was living in the common street, from whom could they learn it? And here, they grew up with it" (Interview with E.H., 2014).

As a result,

"if you compare them with children from the outside, they are stronger, they know what they want, they know how to formulate their wishes, they know how to deal with other people" (Interview with E.H., 2014).

Furthermore, as a result of the cohousing environment, he believes that his daughters have learned the value of sharing:

"Okay, 'you can use my bike or you can use this'; [...] she did it with bracelets, with dresses, [...] she even borrowed shoes from her girlfriends" (Interview with E.H., 2014). And "she would have never done it, if she would grew up in a normal street" (Interview with E.H., 2014).

A Danish interviewee agrees, hoping that for his children, "growing up here will give them some social skills that normally they wouldn't otherwise get" (Interview with J.G., 2014).
Even more so, another participant highlights the fact that a cohousing environment helps children grow up with a positive attitude towards their surroundings, as children learn

"to work together with different kinds of people and grow up seeing that other adults around them want to help them when it is needed" (Interview with H.B., 2014).

c) Other considerations

A smaller number of interviewees mention three further motivational determinants that influenced their decision to live in cohousing: receiving emotional support; avoiding the limitations experienced in other communal settings; and ecological considerations.

Receiving emotional support

Twelve interviewees were also motivated by the emotional assistance they can receive in cohousing. Interviewees remark the support received from the part of the community while going through difficult periods in their life, such as sickness, family issues or separation. Such support happens on an informal basis (with the exception of one senior community where mutual support mechanisms have been formally developed); and is mostly the result of the bonds developed among residents (see next section of this chapter). The prospect of receiving such assistance in cohousing also provides reassurance to a UK interviewee and founding member of a recently-emerged community:

"when I’m older, and I live a long way from the family, I don’t have children; I could see how cohousing when I’m in my 70s or 80s be really supportive, so I think that kind of was a big thing" (Interview with M.C., 2014).

Similarly, emotional support has been highlighted by members of a Dutch senior cohousing community as well, who use a system called 'one mate' as a mutual aid mechanism, if needed. If someone is ill, the respective person's 'mate'
"knows if I want to have visitors, if I need something"; and although "she doesn’t have to do everything for me, she can tell to others that [M.K.] doesn’t want any visitors, for example" (Interview with M.K., 2014).

**Avoiding the limitations experienced in other communal arrangements**

Six interviewees (ex 46) indicate that they have had prior communal experiences, either in intentional communities like kibbutzim or communes, or by sharing a house with a number of other families. They mention that they chose cohousing as it allows them to avoid the limitations that they experienced in other communal settings. This limitation is mainly related to the lack of privacy and of balance between personal and social life. This balance has been tackled earlier in this section when taking about the primary motivation for participating in cohousing. It will be further discussed into detail in the next section of this chapter.

**Ecological considerations**

The analysis of data from this study reveals the fact that only a small minority (three interviewees ex 46) consider ecological values as a motivational determinant for their decision to live in cohousing. Despite of this, 15 interviewees mention the existence of a 'light' sustainability ideology in their communities; or as one UK interviewee puts it: "people do have some green values, with a little 'g'" (Interview with N.S., 2014).

 Nonetheless, they usually state that ecological values are not necessarily a key determinant for their decision to live in cohousing:

“I was always very clear that the kind of the eco, practical eco side of it - although I think it is good and I am interested- it is not the first thing for me to be honest, it was about having the community spirit and maybe this thing that we are calling spirituality” (Interview with B.T., 2014).
Among the few mentioning ecological factors as a motivational determinant, a Dutch interviewee indicates that he is keen on

“the possibility of doing things together, also in respect to sustainability aspects; [...] because for him sustainability is one of the things we need to develop in this world, like an ideal” (Interview with H.W., 2014).

He develops his point of view further, stating that the scarcity of meaningful social interactions among neighbours in contemporary Western urban agglomerations represents an impediment for sustainability, because

“If you want to be more sustainable, you have to share more things; and if you want to share more things, then you have to interact with each other more” (Interview with H.W., 2014).

Consequently, he sees the cohousing model as a way of addressing the non-sustainable living lifestyle prevalent in many modern societies (Interview with H.W., 2014). On a similar note, one UK cohousing resident remarks that he acknowledged the fact that he “must do something about green issues”, as he was living an unsustainable life (Interview with A.T., 2014); and after moving to a rural cohousing community he realised that he at least possessed all the facilities to live more sustainable: “I got the garden, I got the poly tunnel, I got biomass, the electricity is green, the bio digester etc.” (Interview with A.T., 2014)
6.1.3 Brief conclusions of this section

Interviewees have mentioned two primary motives for participating in cohousing: for the vast majority of interviewees, it is an enhanced sense of community, while also maintaining personal privacy; while for a minority practical considerations (e.g. access to better housing) are most important. Besides the two primary motives for participation in cohousing, interviewees have mentioned additional social and practical motives for engaging and remaining in the setting (see figure 7). These six motivational categories (including the primary motives for participation) can be further classified in two sections.

On one hand, there are social motives:

- an enhanced sense of community, while also maintaining personal privacy (the main determinant for the vast majority of the interviewees). For some interviewees this desire has its roots in their experience of increasing social isolation in modern urban mainstream settings;

- enhanced opportunities for self-development; as some interviewees consider that the requirement of the setting for reaching common solutions represents a learning and development journey for them. Furthermore, they consider that cohousing represents a more positive setting than the mainstream environment towards self-development, due to people having fewer preconceived conceptions. It also enhances the possibility for expanding their personal views, due to the more frequent interactions with people that might have opinions different than theirs;

- ecological considerations, due to the 'light green' ideology prevalent in most of the studied communities;

- an enriching medium for children, due to easier access to their peers; and their involvement in certain communal tasks;

- avoiding the limitations experienced in other communal arrangements, due to the balance between communal and private life;

- receiving emotional support.
On the other hand, there are ‘practical motives’:

- practical considerations, such as receiving emotional and instrumental (shared tools; increased borrowing from neighbours) help due to the development of social networks; access to better housing and facilities; and the easier possibility for increasing one's social circle due to frequent interactions;

- receiving help with child-care, such as informal help with babysitting; help with picking up children from school; or the possibility to spend more quality time in the afternoon due to the common meal system;

- a more secure environment for growing up children, due to lack of cars on-site; and the closer connections (compared to mainstream settings) between children and their adult neighbours.
6.2 Effects of the main motives for participating in cohousing on the long-term success of communities

-An enhanced sense of community that also allows for privacy-

Figure 8: How the main motive for participation affects the decision of individuals to remain in cohousing. Source: Author, 2016.

The previous section examined the primary motives for participation among cohousing residents; a pre-requisite for answering the two main research questions of this chapter. This section will deal with the second research question:

How do the main motives for participation affect the long-term success of cohousing communities?
The primary motive mentioned by the vast majority of the interviewees was the desire for an enhanced sense of community, while preserving their privacy. Cohousing communities, as resident-driven and resident–managed developments; are usually the result of the desires and input of their residents (see development phase chapter for a more detailed discussion). Therefore, the resulting community and ‘living systems’ that help govern it are (in some cases, strongly) influenced by the residents. In other words, their main motivation for participation is reflected in the outcome of the community.

Striving for an enhanced sense of community while also maintaining privacy, positions cohousing on a spectrum between standard housing, on one extreme, and communes, on another. Cohousing communities will be placed closer or farther to these two extremes depending on the desires of residents and the development circumstances. This means that cohousing tries to balance community aspects with personal privacy; an endeavour that has important consequences for the long-term success of communities. It does so because of three main considerations:

- there is a higher level of interaction in cohousing, which enhances the development of bonds and friendships compared to mainstream settings;

- at the same time, there are only informal levels of support in cohousing. This means that developing bonds/friendships with neighbours (outside of the formal meetings) are necessary if the expectations from cohousing are to be realised;

- lack of formal support also means that people with high expectations in this regard will be disappointed.

All these considerations are related to the main motive for participation mentioned by the vast majority of the interviewees; and will be part of the discussion from this section. It must be noted that the data analysis also reveals that if material considerations are the primary motive for participating in cohousing -as mentioned by a minority of interviewees-, then the long-term success of cohousing communities will be negatively affected. For clarity purposes, this latter consideration will be discussed in the next section of this chapter.
6.2.1 Higher opportunities for interaction enhance the development of bonds/friendships in cohousing

The main motive for participation mentioned by the vast majority of interviewees implies an enhanced sense of community compared to (the perception of many interviewees regarding) mainstream settings. Such an enhanced sense of community can be achieved by fostering a higher level of interaction among neighbours living in cohousing.

In absence of such interactions, cohousing could run the risk of becoming more or less what Meijering describes as ‘solely’ practical intentional communities, developed with a utilitarian goal in mind (Meijering, 2006; Meijering et al., 2007). Their aim is usually to take advantage of better housing and living conditions compared to mainstream options by living in a communal setting (ibid.). Such communities adopted a communal life-style “only to enable comfortable family lives, and [communality] was not a goal in itself” (Meijering, 2006, p.114). Various types of housing cooperatives, ‘intentionally- created’ forms of student coops, or even therapeutic communities are considered practical intentional communities (ibid.). Unlike cohousing, practical intentional communities do not “have to include complete resident management, strong participation in the development process, or dining together” (Vestbro, 2010, p.22); and as such the interactions among residents are significantly more reduced compared to cohousing.

a) Higher levels of interaction in cohousing, compared to mainstream settings

In order to avoid being just a practical community, with people coming together solely for utilitarian purposes, a higher level of interaction is required from cohousing. Such higher level of interaction among residents of cohousing happens because of several factors:

- the conscious decision of adult residents to be part of a community, meaning that they will have to interact with their neighbours more than in a traditional setting;

- the participatory development process and the democratic decision-making system; which require involvement and collaboration from the part of the residents of the community (see more details in the development phase chapter). As one UK interviewee indicates,
"on one hand [cohousing] is about knowing what you want to get out of it, how it can enhance your life" (Interview with C.T., 2014); and on the other hand it is about "yourself, giving your time to people, and the challenges you face and how you meet the challenges when people don’t agree with what you are trying to do" (Interview with C.T., 2014);

- the wide-spread requirement for being part of a cooking team and being involved in communal meals or in the maintenance of the community, as noticed in 10 of the 16 case-examples (see annex I). According to one Swedish interviewee,

"it is much easier to get to know people when you eat together, cook together and things like that" (Interview with T.U., 2014).

Contrary to standard settings, where physical proximity might also be a factor, however where "you don't get to know your neighbours in the same way" (Interview with O.U., 2014); being involved in communal cooking, maintenance and other joint activities in cohousing results in much closer bonding between neighbours: "I know the names of everyone and I know who they are, I know their families, and their children" (Interview with O.U., 2014);

- the possibility to join the neighbours in a plethora of joint activities, ranging from field trips to musical evenings, lectures and presentations or movie showings. As one Dutch interviewee indicates, the development of bonds is greatly enhanced by the shared activities happening in the community, "like this living room concerts which I also organise, [...] or maybe a gaming evening" (Interview with H.W., 2014). In a researched Danish community, they have established a yearly tradition:

"a summer holiday camp [...], 15 households from the community, four days on an island that we rent for that occasion" (Interview with T.G., 2014).

The success of the endeavour surprised them, because "we live together every day of the year, but we still decided to go on holiday together"; nonetheless it is considered an important
catalyst for developing bonds (Interview with M.G., 2014). Besides the joint activities, the role of subgroups in developing bonds among North-West European cohousing residents is also important:

"we have some groups working on important issues; some issues are very important, while others are more just for fun; and through that interaction you get to know people, so these groups are a very important social catalyst as well" (Interview with A.D., 2014);

- the physical proximity and the conscious design of the site aimed at encouraging casual social interactions between the residents of the community (for more information see physical design chapter). According to a Dutch interviewee:

"I find it easier to make contact with some people here, because it is much easier just walking in each other's house; so that makes the connection a bit deeper than normally, I suppose" (Interview with M.R., 2014).

b) The development of bonds and friendships in cohousing, as a result of the higher levels of interaction

As a result of the higher levels of interaction among cohousing residents; no fewer than 42 interviewees (ex 46) mention that in their opinion, the cohousing environment enhances the development of bonds between residents (compared to mainstream settings). These positive accounts regarding the development of bonds in cohousing among the majority of the interviewees are resonant with the premises of social capital theory discussed in the literature review chapter of this Thesis. In terms of community development, social capital theory mentions that interactions and participation in the community can lead to higher social cohesion, by enhancing the development of trust, bonds and reciprocity among people.

Following this logic, trust between residents, which can result in bonds or possibly friendships, is easier to develop in cohousing. As two Danish interviewees (from different
communities) remark, in cohousing “you place your trust in people” (Interview with L.A., 2014); as “trust is very important” when living like this (Interview with H.G., 2014). This is because of the more frequent interactions compared to mainstream settings and the need for closer collaboration in order to develop/manage the community. To further exemplify this point, one Dutch interviewee mentions that the connections being developed in cohousing are less superficial compared to the ones between neighbours living in mainstream settings.

Whereas in the latter setting

"you say 'hello, this and that'; but most of the time the connections are superficial, at a surface level"; in his community "you know much more about your neighbours and the other people living here, because they also tell you other stories, so you are more intimately connected" (Interview with E.H., 2014).

This helps with the development of trust between residents and enhances the sense of community, as one Danish interviewee considers:

“you always have people close by you kind of know and trust; we once had a woman from Turkey who visited us and when she came she said: this is just like a village in Turkey! Apparently they build villages a bit like this, kind of a community, so it is like a living social community here” (Interview with J.L., 2014).

As a consequence, one Swedish interviewee emphasizes that the connections among residents are much deeper than in mainstream environments:

"you can't even compare it with an ordinary living situation; [...] we know each other's children and grandchildren and dogs and everything" (Interview with E.F., 2014).

One Dutch interviewee explains the rationale behind this difference between cohousing and mainstream settings. In his view, living in cohousing means that
"you have something in common and you see each other more often than people who don't live here, [...] and you [...] always have something to talk about; and I think it enhances the development of bonds, definitely" (Interview with J.W., 2014).

As a result of such possibilities, one Swedish interviewee remarks that

"I've got 50 new acquaintances, if not friends; [...] I know everyone here, I can sit down with everyone, have a chat and discuss anything, [...] and some of them have grown up to be friends for me" (Interview with O.U., 2014).

These examples further helps explain the link between higher interactions (compared to mainstream settings) and the easier development of bonds in cohousing. However, it must be mentioned that such bonds do not necessarily develop into deep friendships. As one interviewee remarks, the development of such friendships depends on a variety of factors, like personality, interests, and a certain feeling of 'connection' between people:

"with P. I have other connections than I have with M. or other people- you are simpler, or more sophisticated, or you prefer more creative persons; depends on what you want" (Interview with E.H., 2014).

In case of larger communities, it is improbable to have the energy and time to become friends with all other residents: "I like everybody, but you don't have the same contact with everybody; I guess that is normal for 70 people" (Interview with C.R., 2014). Adding to that is the fact that "you also have your friends outside of the community, there are friendships to maintain there as well" (Interview with N.L., 2014).

In this sense, cohousing can be compared to a traditional village from the past, where

"you know everybody, you can talk to everybody and know everybody's name, but it is not like you are close friends [with everybody]" (Interview with N.L., 2014).
6.2.2 Bonds among residents- an influencing factor for fulfilling some of the social and practical expectations of residents regarding cohousing

Prior to continuing the discussion about the influence of motivation on the long-term success of cohousing, Vroom’s expectancy motivation theory will be introduced. It will help develop the argument regarding the link between satisfying the motives of individuals for participation and their decision for participating in cohousing. This can affect the cohesiveness of communities.

a) Vroom’s expectancy model and its application regarding the motivation for participating in cohousing

From its inception in the 1960s, this theory has been the subject of a variety of empirical studies (Renko, Kroeck, Bullough, 2011), due to its potential for practical application (Quick, 1988). Initially developed to explain the behaviour of people in work conditions, Vroom’s theory is based on the premise that individuals will choose the behaviour “that will result in [them] getting the more valuable output or reward, provided they see the reward as attainable” (ibid., p.30).

As such, the theory consists of three key elements: “a person is motivated to the degree that he or she believes that (a) effort will lead to acceptable performance (expectancy), (b) performance will be rewarded (instrumentality), and (c) the value of the rewards is highly positive (valence)” (De Simone, 2015, p.19).

![Figure 9: Basic expectancy model. Source: Luneburg, 2011, p.2.](image-url)
Consequently, Vroom regards motivation as the multiplication between these three elements:

“Motivation= Expectancy x Instrumentality x Valence” (Luneburg, 2011, p.3).

The multiplication effect implies that the higher the value of these three elements, the higher the motivation. If any of the elements has a value of zero, regardless of the value of the others, motivation will be nil (ibid.). For example, the overall motivation of an individual will be nil if s(he) believes that his/her effort will lead to increased performance, which will in turn lead to receiving a reward; but s(he) believes that the value of the reward is zero for him/her (valence is nil). Similarly, even if a reward seems highly important for an individual, if s(he) doesn’t believe that there is any possibility that his/her better performance will grant such a reward, then the motivation will still be zero (instrumentality is nil).

Vroom’s expectancy theory, although developed in regards to the motivation of people at work, can be useful in explaining how the motivation of residents impacts their level of satisfaction with cohousing, and potentially, their decision to stay or leave (and consequently, the long-term success of communities). The variables of the expectancy model can be extrapolated to this end, as follows:

**Motivation (M)**- the motivation of individuals for remaining in cohousing, for continuing to participate in their communities;

**Expectancy (E)**- the expectation from the part of cohousing residents that engaging in cohousing, either from the stages of the development process, or after the community was built (or both), will eventually result in some of their goals for participation being met. Expectancy value can be considered positive in the case of the interviewees for the six categories of motives for participation in cohousing (see figure 7). That is because all interviewees are residents of existing communities, and have mentioned that they have been motivated by these categories in order to engage in cohousing. This implies two things:
- one, usually they have to put an effort in order to become/remain members of a cohousing community. Individuals need to devote financial and time/energy contributions to be part of a community. Such effort from their part can consist of cooking and cleaning (for communal purposes), being part of work groups, participating in meetings, pooling financial resources (for communal purposes) etc. That is, not to mention the commitments required for individuals participating as early as the development stages (see annex I and the development phase chapter for some of the contributions required from the part of residents);

- two, by mentioning that they have engaged in cohousing due to some specific motives; it means they expect that their effort will be eventually rewarded. Their engagement/effort means that they can become/remain members of communities; a status which should reward their effort by satisfying some of their motives for participation. This also implies that they believe that the setting has the capacity to meet their goals for participation.

Instrumentality (I)- the potential of the cohousing model to satisfy some of the motives of its residents for participation. In other words, the decision of residents to engage/remain in cohousing is influenced by the capacity of the setting to fulfil (some of) their motives for participation. Because the decision of individuals to join cohousing is a voluntary one, they assume that the setting possesses a certain capacity to meet (some of) their motives for participation.

This implies that their motivation for participating in such communities will be influenced by whether the setting has indeed the capacity they assume for fulfilling some of their motives for participation (‘instrumentality’). This can be argued especially in view of the effort generally involved for becoming member of such communities (there are exceptions, such as people joining just for better housing and not participating at all, which will be discussed further in this chapter), as it usually implies more interactions, effort and engagement compared to mainstream living settings (see expectancy variable).
Valence ($V$)- the rewards of engaging and remaining in cohousing has a value for the residents. Interviewees have mentioned six broad categories of motives for participating in cohousing (see previous section of this chapter); and as a consequence the value of satisfying them is positive. In other words, the variable ‘$V$’ of the expectancy model will be positive in case of satisfying these motives for participation; because interviewees have mentioned that they are important for them.

Following the accounts of interviewees, motives for participation have been divided in ‘primary’ and ‘secondary/additional’ motives. This implies that the value of the reward, and hence the motivation for remaining in cohousing, will be higher for the former, more important motives for engaging in cohousing. Besides this consideration, it is not within the scope of this study to ‘weight’ the value of such motives for individuals.

Due to the multiplier factor in the equation of the expectancy theory, all these three values need to be positive in order for individuals to have any motivation whatsoever for participating in cohousing. The expectancy and valence variables will remain positive in case of the interviewees for the six categories of motives for participation mentioned by them (as discussed above). In short, there will be at the very least a certain motivation for individuals to participate in cohousing if the setting will satisfy some of their motives for participation, as a reward of their effort for being part of a community. The degree to which this impacts residents depends on the perceptions of each individual.

That is not to say that there aren’t other reasons for the decision of people to keep participating in cohousing communities; besides their motives for engagement being met. Interviewees have mentioned financial, personal and technical considerations (e.g. houses in the community are too small for a growing family) that also influence this decision. According to a Swedish interviewee, in his community a higher turnover “is because the flats get to be too small for some families; that is the main reason why they leave” (Interview with T.P., 2014).

However, in accordance with the expectancy theory, whether cohousing fulfils some of their motives for engagement also influences the decision of individuals to keep participating in their communities. Some interviewees give accounts of this. As one of them recounts, one
older person from a studied intergenerational community decided to leave because she felt that the setting wasn’t realising her expectations:

“like for example, there was an older person who wanted to be able to sit out on the green and to read the newspaper, without children rushing around. In the end I think she felt that it wasn't the right place for her, she wanted it to be more like a cruise ship; [...] and here the balance is maybe a little bit too much towards the children and let them do whatever they want and run around in meetings and so on” (Interview with J.S., 2014).

An UK interviewee further strengthens this argument, stating that his decision to remain in his current community depends on its capacity to fulfil his expectations:

“I am not thinking of somewhere else to be. I can see certain circumstances that might force me to leave; because I expect a lot of this place and if it doesn’t offer me the things that I need, I might decide to find it somewhere else” (Interview with A.T., 2014).

Therefore, in relation to the research question examined throughout this section, and in accordance with Vroom’s expectancy theory, it can be argued that the decision of individuals to keep participating in cohousing will be influenced by whether the setting satisfies (some of) their motives for participation or not. This argument is shared by McMillan in his sense of community theory as well (see: McMillan, Chavis, 1986; McMillan, 1996). In his view, meeting the needs underpinning the motives of individuals for participation is a key aspect of a strong community: “it is obvious that for any group to maintain a positive sense of togetherness, the individual-group association must be rewarding for its members” (McMillan, Chavis, 1986, p.12).
b) Importance of bonds between residents for some of the social and practical expectations from cohousing

Why bonds between residents influence the fulfilment of expectations from cohousing

The previous section has examined how the desire for an enhanced sense of community, while maintaining the possibility for privacy implies higher interactions in cohousing compared to mainstream settings. This results in the easier development of bonds and friendships among residents, compared to mainstream settings. Nonetheless, the main aim of the researched communities is to foster social interaction, without sacrificing personal privacy. Lack of privacy was a usual occurrence in the communes of the 60s and 70s, (Rhoades, 2008; Firth, 2010); and was mentioned by interviewees from this study with prior communal experience (to cohousing) as well (see first section of this chapter). In order to avoid such occurrences, personal privacy emerged as a crucial feature of cohousing as well.

This desire for both communality and privacy is reflected in the organisation and daily life of cohousing communities. In 15 of the 16 studied communities, this means that support between residents is provided only on an informal basis: residents are not obliged to engage in the community beside their obligatory chores (usually being part of a cooking and cleaning team every few weeks, and pooling some resources for communal use- see annex I) or support their neighbours in any way. Formalising support between neighbours would have meant that cohousing leans towards the more ‘intensive’, ideological approach prevalent in communes. This would go against the main principle of the model: balancing community with privacy, thus avoiding (what many perceive as) the shortcomings of communes. The striving for such balance and lack of formal support between residents is more in line with mainstream norms; and detaches cohousing from more ‘ideological’ forms of intentional communities (e.g. communes, ecovillages etc.). The only exception among the researched cases is a senior Dutch community where a formal support mechanism is in place; however that has more to do with health and old-age issues. This lack of formal obligation for support means that residents need to interact and develop certain connections and bonds in order to be able to satisfy some of their motives for participation (as it will be detailed further in this
chapter).

In view of the expectancy model, this means that the ‘instrumentality variable’ (the capacity of the setting to satisfy the motives of individuals for participation in cohousing) is dependent on the informal support between residents, itself a result of the interactions and subsequent bonds that develop in communities (see figure 10). In other words, developing bonds among residents is a key factor for fulfilling some of the motives for participating in cohousing mentioned by interviewees. This statement will be exemplified through some of the social and practical motives for participating in cohousing (mentioned by interviewees), in the remainder of this section.

**Figure 10:** Expectancy theory extrapolated for cohousing. **Source:** Author, 2015
How bonds among residents influence the fulfilment of some social expectations from cohousing

Besides the main motive for participation in cohousing, interviewees have mentioned additional ‘social’ motives, such as enhanced opportunities for the self-development of adults and children, ecological considerations, and receiving emotional support (see figure 7). The role of the development of bonds in their fulfilment will be discussed in this section.

Impact of bonds on receiving emotional support in cohousing: The emergence of bonds between residents leads to having "not exactly friends, but people that you can rely on, fall back on, and [not being] alone"; and results in an enhanced level of such support compared to traditional settings (Interview with J.W., 2014). Exemplary in this regard is the account of a Swedish interviewee, for whom receiving emotional support from her cohousing neighbours was especially important due to a difficult situation in her life:

"I had to be with him [an ill person requiring constant surveillance] almost all the time, but it was so important to have people around me to support me emotionally and just to say a few words to me" (Interview with K.F., 2014).

Given the lack of formal support structures in her community (as in all but one of the 16 researched cases), such support is made possible mainly due to the bonds developed as a result of interactions in cohousing:

"it is like a gift, to be able to get to know new persons in this way, when you do things together; and you don't have to be friends, but you make acquaintances, you get to know much more about people when you are doing things together, and I think that is fantastic" (Interview with K.F., 2014).

This argument is strengthened by the situation from a studied intergenerational Danish community. In absence of formal support (which would not fit with the ideals of cohousing) the bonds developing between residents lead to emotional support networks:
"it has happened that we had people being ill; when something like this happens everyone just kind of gets behind people, we support each other [...] and things do happen" (Interview with J.L., 2014).

The development of bonds within the studied communities can account for different types of support as well, as noticed in one UK community:

"I wanted a meditation group; three days later I had a meditation group; in a ‘normal’ life setting, that would take a lot more effort" (Interview with M.C., 2014).

Furthermore, receiving support from other residents can be particularly important for seniors, due to issues of health and old age. This has been highlighted in the case of a senior Dutch cohousing community:

"we three have our husbands, and they are our mates; but if you live alone, it is important just to have someone who knows about you" (Interview with M.K., 2014).

In such cases, the lack of formal support networks means that interactions and bonding area requirement for receiving emotional support. Furthermore, one interviewee considers that the interactions and emergent support for seniors in the respective community have positively impacted the recovery process of some of her neighbours:

“we had a lot of people who had a disease, or a broken leg or something like that. What you see is that they come into society again in a much easier way. I think that works out, it revitalises people” (Interview with H.K., 2014).

This statement is strengthened by a similar case from an intergenerational Swedish community, where support for senior people is made possible as a result of interactions and emergent bonds: "we have a blind, 87-year-old woman living next to us, and we help her, and she never wants to go away from this house" (Interview with D.P., 2014).
Similarly, the bonds developed among residents in a Swedish community result in emotional support, as one interviewee recalls:

"we already had two people who have been living here from the beginning [and] who died here, we have their photos down in the hallway; so I feel that I can live here for the rest of my life" (Interview with D.P., 2014).

Therefore, developing bonds with your neighbours that can turn into support if needed (reciprocity) can represent an important motivation for seniors, as remarked by an UK interviewee:

"and support, and I suppose particularly as I grow older; my daughter is an only child and I think she would feel terribly responsible if I would still have been living in a house in R., and I was on my own" And now, "she rings up and I am so busy, that she is not worrying about me" (Interview with J.S., 2014).

According to another Swedish interviewee,

"that is really important, because it takes a lot of stress away from your children; they know that we have fun and that we are alright, [and] we don't depend on our children because we can get so much from each other" (Interview with K.F., 2014).

Impact of bonds on the possibilities for self-development of adults and children in cohousing:
Interviewees have mentioned that living in a cohousing setting requires of them to work together with people that might have different perceptions, opinions, and/or personality than those of their own, in order to reach the common solutions demanded by life in an intentional community (see previous section of this chapter). This can be a demanding task; requiring energy, commitment and skill for mitigating opposing views, opinions or personal conflicts that are bound to appear at some point. Finding common solutions to such difficulties, being
exposed to a variety of different perceptions, and the possibility to exchange ideas with different people represents a potential for individuals to become more open-minded. Without interactions and emerging bonds, such a level of self-development would not be possible; in which case the cohousing model would struggle to provide for individuals motivated by self-growth opportunities. As one Swedish interviewee remarks, the interactions and resulting bonds between neighbours means that people are not afraid to speak up their mind and be receptive to different views (Interview with A.F., 2014). This aids their self-development process:

"as we live so close to each other, you know that you don't have to be afraid to have a different opinion" (Interview with A.F., 2014). As a result, "if I know that another person doesn't have the same opinion as me, then I want to talk to him or her, just to hear their point of view; and perhaps I can learn something out of it" (Interview with A.F., 2014).

The social interactions and resulting bonds among residents are also important for the self-development of children that grow up in cohousing. According to interviewees, the frequent interactions in cohousing (compared to mainstream settings) lead to the development of trust and of bonds between children and adults. This means, according to one Danish interviewee and father of two, that children

"grow up with the idea of their surroundings being positive towards them; [...] and] that would give a positive attitude towards humanity, in a way" (Interview with H.B., 2014).

Impact of bonds on the ecological motives for participating in cohousing: The closer ties and higher opportunities for interaction between cohousing residents lead to ample opportunities for discussing and disseminating environmental ideas and practices. This results in an enhanced capacity for educating people in regards to environmental awareness; as 11 interviewees highlight. Given the importance of pro-environmental behaviour for the environmental sustainability of communities, these considerations will be tackled in the environmental sustainability chapter of this Thesis.
**How bonds among residents influence the fulfilment of some practical expectations from cohousing**

Besides the main motive for participation, interviewees have mentioned several practical motives, such as receiving practical support, receiving help with child-care, and a more secure environment for growing up their children (see figure 7). The role of the development of bonds in their fulfilment will be discussed in this section.

**The emergence of bonds as a factor influencing instrumental support in cohousing:** Receiving practical support in cohousing also depends on the development of informal support networks; a result of the formation of closer bonds and reciprocity among residents (Meltzer, 2005). Generally in cohousing such networks emerge solely on an informal basis; as otherwise the setting could become too ‘intrusive’ and ideological. This is epitomized by the words of an UK interviewee and co-founder of a cohousing community, who considers one of the backbones of the cohousing model to be the "social interaction that would then become support in the longer term" (Interview with M.C., 2014). He goes on to add that reciprocity and bonds in their community

"make a lot of the practicalities of life easier, like if I want to borrow something I [just have to] go out and get it; so lots of things can happen very quickly here because of that" (Interview with M.C., 2014).

Along the same lines, one Danish interviewee highlights the advantages of reciprocity in their community, almost as an ‘unspoken’ rule:

"that is my point, that everybody is seeking in this kind of community; that [receiving support] is something that we share and we have never talked about it, it is just something we do" (Interview with L.A., 2014).
Similarly, one Swedish interviewee emphasizes the practical implications of having closer connections with your neighbours, compared to mainstream settings:

"knowing the neighbours is [also] very convenient- from a safety point of view; from a convenience point of view; if you want to borrow something or you want someone to water your flowers while you are away" (Interview with T.U., 2014).

This view is further strengthened by a Dutch interviewee, who notices that the bonds developed with her neighbours due to the cohousing setting results in the possibility for receiving practical support, when needed:

"I like the fact that I know my neighbours, that when I am ill there will always be someone who wouldn't mind picking up something for me from the supermarket or from the pharmacy" (Interview with A.W., 2014).

The emergence of bonds as a factor influencing help with child-care in cohousing: The development of bonds within the researched intergenerational cohousing communities impacts the receiving of help with child-care as well. This is because in the studied intergenerational communities no formal child-care mechanisms are in place, even though it is not uncommon for parents to have an unspoken contract for offering support to each other (Interview with M.C., 2014). Such formal mechanisms might not be feasible in a type of intentional community seeking to enhance the life of individuals, without extensively intruding in it. In more 'intense' communal arrangements however, such practices were widespread (Rhoades, 2008). The result of the lack of formal support mechanisms for child-care is that help in this regard can only be received informally, by developing bonds with the other residents:

"we didn't have like a [formal] childcare thing" (Interview with H.J., 2014); but asking neighbours for help in this regard is much simpler because of the cohousing setting: "if we would have lived in another place, it would not have been so easy" (Interview with H.J., 2014).
As one Danish interviewee exemplifies, the bonds developed in her community mean that
"everybody helps each other all the time with stuff like informal childcare, like picking
kids up from school and so on; so that is different than living on your own, it is easier"
(Interview with N.L., 2014).

Interviewees from two Swedish intergenerational communities have mentioned that single
parents with children are no uncommon occurrence in their communities. The possibility for
receiving informal help with child-care is even more important in such cases. As one of those
two interviewees indicates,

"we have a lot of young families here comprised of single women with children, three
or four of them" (Interview with O.U., 2014); and "for them, this way of living is quite
convenient because they get to meet people, receive help with childcare, if they want to,
everyone can help them" (Interview with O.U., 2014).

Interviewees from two researched UK communities also highlight the ease of receiving
informal child-care in their community, due to the bonds that have emerged over time:

"people don’t need babysitters because the neighbours do it. So like, for me to go next
door, it is very easy to do childcare from 10 to 12, because I can just come back to my
house for two minutes if I want to get a different book... so people save money on
childcare" (Interview with M.C., 2014).

In the second case, a senior interviewee remarks that she is "looking after a little boy on
Wednesday because his mom is on the cooking team and his dad is not back from work yet"
(Interview with J.S., 2014); and she attributes the ease of such a practice in her community to
the interactions and resulting bonds among cohousing residents: "if I would be living on a
standard street, maybe I might have made those connections, but it would not have been so
easy" (Interview with J.S., 2014).
6.2.3 Individuals with high expectations regarding the level of support in cohousing will be disappointed

Interviewees have mentioned that individuals who have had unrealistic expectations regarding the level of involvement and support in cohousing, expecting too much from the community, were disappointed. This is due to the balance between privacy and communality that cohousing strives to achieve; which results in less involvement in the community required from residents, and a lack of formal structures compared to more ‘intensive’ and ideological communal arrangements (e.g. communes). Going back to the expectancy theory, this means that the ‘instrumentality’ of the setting (its capacity for fulfilling the motives for participation of residents) is reduced for individuals with such high expectations. The data does not reveal whether such people left cohousing or not, as other factors can influence such a decision as well (e.g. housing quality). However, in view of the expectancy theory, it can be strongly argued that at the very least, the cohesiveness of communities will suffer if the expectations of people are not met. This is exemplified by the accounts of several interviewees. As one UK interviewee remarks, living in cohousing means that

“you have to be willing to take responsibility for yourself. I think if you want cohousing to solve your life problems, you will be bitterly disappointed. It has not worked for everybody here, it is clear that there are people who don’t like it. But I think that is because they came with unrealistic expectations” (Interview with M.C., 2014).

Another UK interviewee (from a different community) further explains the difficulties encountered by people who had such unrealistic expectations from cohousing: "part of the problem I think is the word 'co' in cohousing" (Interview with M.S., 2014); because they envision a close community,

"something very welcoming, embracing and nurturing; and in fact we are a neighbourhood of people who are living our own lives. And some people are looking for something much more supportive” (Interview with M.S., 2014).
With the exception of one researched senior cohousing community (where formal support structures among residents are sometimes required due to health and age reasons), support structures among residents are informal and evolve naturally as a result of the bonds created due to the cohousing setting (see previous section). Therefore, as another UK interviewee (from a different community) explains, people with high expectations of support from cohousing were left disappointed:

“if something goes wrong, if people have trouble, there is a support for them. There is not a structure of support, it is informal. But some people are expecting something much more formal and felt let down; and other people felt that this is exactly what they are after, and they have taken part and contributed fully. So many have integrated perfectly, while others have had difficulties” (Interview with M.S., 2014).

The need to find a balance and not fully rely on or put too much emphasis on the communal aspect in cohousing is supported by further data from this study. Out of the 46 interviewees, only two mention that they would be tempted to try out in the future a communal setting with more emphasis on community. According to one of these two,

"cohousing has been part of my development process, and actually I can imagine myself wanting something more intense than cohousing in the future; [...] I could imagine living in a commune, actually going more intense" (Interview with M.C., 2014).

For the rest, even though their involvement in the community and the frequency of shared activities might fluctuate over time, the overall intensity of community life found in cohousing is satisfactory. This statement is further strengthened by the fact that out of the ten interviewees who have had prior experiences in intentional communities (communes, Kibbutzim); six of them directly mention that they have chosen cohousing because it is less communal and offers them a much better balance between communality and personal privacy compared to their previous collective settings.
One of them recounts that in his previous communal setting, there was little privacy "as everybody was on top of everybody" (Interview with M.S., 2014). Consequently, he chose cohousing because it means less community and offers the possibility for personal privacy:

"it is set on the model that you got the community, but if you want you can shut the door, you have your own privacy. And that was exactly what I wanted" (Interview with M.S., 2014).

A Swedish interviewee is of the same opinion, mentioning that in comparison with his previous communal experience, in his cohousing community “you can have 100% privacy [...] so here it is a good balance, it is almost perfect, I would say” (Interview with O.U., 2014). Another interviewee living in a senior Swedish cohousing community remarks that her prior communal experience in a kibbutz was affected by a lack of privacy, meaning that in case of personal conflicts "you don't have your own apartment and your own life so you can't get out of the way" (Interview with K.F., 2014). Her current cohousing environment, where everyone has their private apartments and (with the exception of compulsory chores) can choose when to participate in community life, allows her the privacy and breathing space she longed for in the kibbutzim:

“It is too much and I don't think you have enough privacy. And there you need to get along with everybody, and I think it is very difficult to do that. And you can have some very tough times if somebody really gets to you [gets on your nerves]; you don't have your own apartment and your own life so you can't get out of the way” (Interview with K.F., 2014).

Similarly, another interviewee with prior communal experience and founder of an UK cohousing community acknowledges:

“one of the reasons that attracted me most about the idea of cohousing is actually less community, because [in my previous communal living situation] it was full community, all the time; so you want to have something which is your own space, you have your own control over” (Interview with M.T., 2014).
Due to all these considerations, it can be argued that people who have very high expectations regarding the level of interactions and formal support in cohousing will be disappointed. In view of the expectancy theory (and supported by the accounts of interviewees), this means that the setting will not fulfil their expectations; and consequently the cohesiveness of communities will be negatively affected.
6.3 Effects of the main motives for participating in cohousing on the long-term success of communities

-Material considerations-

The previous section examined the impact of the main motive for participation in cohousing mentioned by the vast majority of the interviewees (41 ex 46) - the desire for an enhanced sense of community, while preserving their privacy - on the long-term success of cohousing. It answered the following research question:

_How do the main motives for participation affect the long-term success of cohousing communities?_

This section deals with the same research question; investigating however the impact of the main motive for participation mentioned by a minority of interviewees (4 ex 46): material considerations. The data analysis (the account of interviewees and the situation observed in some of the researched communities) reveals potential negative effects on the long-term success of communities, if individuals are primarily motivated by material considerations for participating in cohousing.

In the studied communities, too little emphasis on community happens when individuals are primarily motivated by material determinants for participating; disregarding or overlooking the social aspect of living in cohousing. According to interviewees, in most cases individuals who are preponderantly motivated by material determinants will still do their obligatory chores for the community (mostly preparation of common meals and maintenance tasks) in order to avoid exclusion. However, their lack of interest (beyond the obligatory chores) in the social aspect and shared activities of cohousing negatively affects the development of a sense of community; and subsequently, of bonds and friendships. The weakening of the bonds among cohousing neighbours has negative implications on the cohesiveness of communities; impacting the fulfilment of practical and social motives for participation mentioned by interviewees.
To exemplify, one Dutch interviewee makes a clear distinction between individuals participating in cohousing solely for material reasons, and the ones interested in community life as well. He recounts examples from his community over the past two decades, highlighting how this can affect the long-term success of cohousing, if wide-spread:

“For new people who come here, we have the first connection with them, the first talk and they say: ‘I have to move out, I live in Amsterdam in a small spot upstairs, I have 20 m² or 6 m² and I want to live here’; most of the time it is not about the group, but about better housing. There is another reason to live here, for example if you live in a village or something like that and you say that you miss the connections and want to live here with more people, that is a different reason to come here. Because most of the time it goes well [in this latter case], because people who come for better housing, they say: ‘I will do it, I will participate’; but after a few weeks or months we never see them again. And they are still living here, you can’t move them out, because they are doing the things they have to do, but not with the heart! They have appointments and they do what they have to do, you can never say that they don’t do the things they have to do, because they do; but they are not here for the community (Interview with E.H., 2014).

The importance of participation and of being motivated by something more than just material considerations is highlighted by another Dutch interviewee (from a different community) as well: "when I look at this cohousing group; it is less than I expected, but still it is more than I see happening in other cohousing groups, on the average" (Interview with H.W., 2014). By asking cohousing residents from different communities across Holland about their social life within the setting, he notices:

"although everyone is different, I sometimes hear that people are living in their own house and maybe eating sometimes together once a month, if somebody is organising something. [...] For the rest of the time, they don't see each other at all" (Interview with H.W., 2014).

In his view, such lack on emphasis on the social aspect of the cohousing environment defeats the purpose of the setting, transforming it in some sort of practical living arrangement (Interview with H.W., 2014). This opinion is supported by another interviewee as well,
mentioning that "sometimes I feel like we should do more together as a cohousing community, because otherwise it is more or less just living with neighbours" (Interview with A.W., 2014).

Examples showcasing the negative impact of people primarily motivated by material considerations on the cohesiveness of cohousing

Further strengthening this argument, in three of the 16 studied communities, a weakening of the cohesiveness of the community because of residents preponderantly motivated by material considerations has been noticed.

The first example is represented by a small urban Dutch cohousing community. Two of the three interviewees from the respective community have mentioned that their main motive for participation was of material nature (e.g. better housing). Furthermore, all three consider living there as just a transitional stage in their life. According to the chairman of the board, this negatively impacts the long-term success of their community:

"I tried to find out what is the common vision of this community and it was hard for me to define that; it would be helpful [...] in order to attract the right people" (Interview with H.W., 2014). In their specific case, "we have not had yet the energy, or tried enough to start a process within this group and actually think about what binds us together, what we really want to go for, what our vision would be regarding cohousing" (Interview with H.W., 2014).

The high turnover rate and the difficulties in fostering more interactions among residents mean that developing a stronger community sense and going beyond preponderant material motives for participation "would be something to do" (Interview with H.W., 2014).

The second example is represented by another (larger) Dutch community, where also two of the three interviewees have mentioned material considerations (access to better housing) as their main motive for participating in cohousing. Interviewees stated that material
considerations were the main motivation for other residents as well; and as a result the cohesiveness of the community is suffering:

"at the moment it is a low level, because there are not so many activities; it would be nice if it would be on a higher level, more activities, more connections. [...] about 60% of the people living here participate in those groups [working groups and shared activities]; and normally we have an agreement that everybody has to do something here [regardless] if you are 16 or you are 80 [years old]" (Interview with E.H., 2014).

One of his neighbours shares his view, further emphasising that in their community, "the common building is big enough for all the things that we want to do, only that at this moment we don’t use it as much as we should use it" (Interview with V.H., 2014). The reduced amount of shared activities and the dwindling interactions among residents mean that the common house "is almost 90% of the time empty, nobody it is using it" (Interview with V.H., 2014).

The third example showcasing the negative impacts of having individuals predominantly motivated by material determinants is represented by the situation encountered in a Swedish community. Given the better quality/price ratio (compared to standard settings) for the highly urbanized area the community is located in, three flats out of a total of 25 have been acquired by individuals/families interested solely in better housing, and not the cohousing setting. As such, they have decided to completely opt out of the community. Cohousing residents own their flats over there and are free to sell them to whomever they choose. The inability of the board to attract individuals/families interested in the cohousing setting and not just in better housing has led to such an extreme situation:

"I wrote to them that I would like to invite them to common dinners, just to meet your neighbours etc. [...] and it is very complicated even to get an answer from them" (Interview with O.U., 2014).

The chairman of the board considers this situation as a ‘real threat’ for the long-term success of the community because
"it can dilute the number of members from the cohousing group; […and] that means in fact that every time there is a change of ownership in some of the flats, that someone who is not interested in cohousing can move in" (Interview with O.U., 2014).

Practices aimed at lessening the possibility for people motivated primarily by material considerations to join cohousing: Given that residents own their flats in the above community, the chairman mentioned that a solution for avoiding such situations was to have a large waiting list with people ‘interviewed’ regarding their intentions for moving in cohousing. This larger ‘pool’ of prospective residents increases the chances that people interested in the setting will be able to move in:

“That is one way of going around the issue with the change of ownership. If you have 100 people who would like to live here [because of the cohousing environment], then eventually someone from them is open to pay more for that. Also if we need to add one or two people more, then I can use this list” (Interview with O.U., 2014).

Extensive waiting lists and co-opting external members (see below) are ways for cohousing communities to avoid the negative implications of individuals/families not participating. The importance given to such practices can also be considered an indication of the long-term negative effects of having individuals primarily motivated by material considerations in cohousing. As one interviewee and member of the board in a Swedish community confesses,

“it is a threat to cohousing group. It is a real threat! Because it can dilute the number of members” within the community who are interested in the cohousing model, not just better housing(Interview with O.U., 2014).

Exemplifying the importance of this statement, in three of the four researched Swedish communities, an ‘innovative’ practice has been employed. This practice consists of having a number of ‘external members’, “people who want to be part of our community even if there are no flats available” (Interview with K.D., 2014). These external members take part in all
the regular activities (cooking, maintenance works, working groups etc.), just as if they were living within the premises of the community. One of the purposes of having external members is to avoid situations where new people join because of better housing, and not of the setting:

“we want to have a bigger group to choose from [...] so this is very convenient, because we can see who they are and they can see who we are. [...] So usually whenever we have a free flat, some people apply for it, and on average maybe half of them are members of our community [external members] already” (Interview with K.D., 2014).

This practice of co-opting ‘external members’ has been adopted in another Swedish community as well:

“They are coming to the house to cook with us, so they belong to a cooking group even if they don't live in the building. But they perhaps want to move in at a certain point, so they can experience for themselves how the climate, the atmosphere is over here, and see if it is something for them or not”. (Interview with A.F., 2014)

Having external members can alleviate the concern regarding the negative impact on the community if people uninterested in the setting, but motivated by better housing, do join:

“And it might happen that such people are not necessarily interested in cohousing. We know the example of T. [the situation in the third example described above]; so we have to use our experience [...]. So then we know them [external members] a little bit better, and it is easier to decide if we have to choose someone for an empty flat” (Interview with A.F., 2014).
6.4 Lessening the impact of conflicting motivational priorities in cohousing

The previous three sections have dealt with the motives of individuals for participating in cohousing; and with their impact on the long-term success of communities. This section will deal with the third research question of this chapter; looking at solutions for lessening the impact of divergent priorities among cohousing residents that are likely to occur over time:

*Can the impact of conflicting motivational priorities in cohousing be lessened?*

In the long term, the literature mentions the possibility for the appearance of conflicting priorities among cohousing residents (Sullivan-Catlin, 1998). These can be caused by various life-situations, like having a baby or having to take care of elder members of family; and/or shifts in the needs of individuals (ibid.). To exemplify, interviewees from one of the studied communities mention that a rift between residents who desire a more enriching social life, and people interested (at this time) mainly in the practical advantages of the setting has occurred. The former group would like to enhance the sense of community by increasing the frequency of communal meals and other shared activities; whereas the latter are content with the safer and more ‘helpful’ environment (compared to mainstream settings) for growing-up their children.

According to one resident of the respective community,

"there is a group that wants more community, and a group that wants less, [like just] thinking about practicalities, and the things in the daily lives of families that are easier here; these are the things that they [the latter group] focus on” (Interview with J.G., 2014).

As stated by one interviewee, this difference of views has already affected the harmony of the group; and if left unchecked, could have negative consequences for the long-term success of their community. According to Sullivan-Catlin’s research, there are certain factors that can
ease the disagreements and conflicting motivational priorities to a certain degree (see chapter V, page 117). These can help maintain group identity as long as the divergent interests do not become seriously incompatible (Sullivan-Catlin, 1998). Such factors have the benefit of maintaining the interest of people in cohousing, even if they are dissatisfied with some aspects in their communities (ibid.). The data analysis for this study reveals two such practices that have the potential to ease tension and dissatisfaction among cohousing residents: allowing a degree of flexibility in the everyday functioning of the community; and fostering a sense of 'ownership' among residents due to an inclusive decision-making system. In doing so, they can positively affect the long-term success of cohousing.

6.4.1 Allowing a degree of ‘managed flexibility’ in the everyday functioning of the community

More than half of the interviewees highlight the importance of allowing a certain degree of ‘managed flexibility’ in regards to the involvement of individuals in the community (24 interviewees, as opposed to only two desiring tighter rules), especially in the case of obligatory chores. They recommend it as an important practice for cohousing. Managed flexibility means that individuals still have to participate in the obligatory chores (they cannot opt out completely); however solutions are found so that their contribution corresponds with their life situation. This degree of flexibility is seen as an important catalyst for participating in cohousing for a longer period, something "that everybody is seeking in this kind of community" (Interview with L.A., 2014) and "that will work for a long time" (Interview with M.H., 2014).

Managed flexibility in order to cater for people in different life situations

Interviewees generally feel that a 'millimetre democracy' with very tight rules (Interview with H.B., 2014) would be "really killing the community and the whole sense of making everything work" (Interview with M.A., 2014). A very strict management not based on trust would be "like draining out all the energy of the community" (Interview with M.A., 2014). In other words, keeping score and "measuring up [contribution to the community] inch by inch"
(Interview with L.A., 2014) is regarded as a negative thing for North-West European cohousing.

Interviewees remark that people in different living situations will be able to offer different levels of involvement. This is because in the long term, various personal issues that might hinder one's ability to participate in the community can come into play. According to one Danish interviewee, that is a common thing regarding everyone living in cohousing, and

"you can feel over the years that there are periods, myself included, when you back down a little, not participate that much" (Interview with L.A., 2014).

This is because sometimes work or relationship or other family issues can appear; which lead to "periods of time when you don't have a surplus to participate as much" (Interview with L.A., 2014). Such situations being widely accepted represents an important boost for the interviewees from the respective community. In practice, this means for example allowing flexibility when having to complete chores:

"Oh, I didn't go to gardening today; it doesn't really matter that much, because you can do something else tomorrow!" (Interview with L.A., 2014) Such a flexible approach acknowledges that "everybody will be in different situations: sometimes they can put in a lot of work, sometimes they can't" and is based on trusting people "that they will do whatever they are capable of doing" (Interview with M.A., 2014).

Another interviewee that in the 25 years since he lives in a cohousing community,

"during some periods I have done more, and during others, I have done less; [...] and for me it is important to accept that for other people it can happen in the same way" (Interview with H.J., 2014).

Similarly, an interviewee who was pregnant while living in one of the researched communities confesses that "I couldn't do so much when I just had a child" (Interview with
She found it very helpful and encouraging that in exceptional cases people can just "ask to be excused from cooking or cleaning"; and are allowed to "have another type of contribution [in case of] a really bad back or stuff like that" (Interview with L.L., 2014).

A Swedish interviewee highlights the value of flexibility in case of the obligatory quota for preparing the communal meals, the principal shared activity in most of the studied communities (13 out of a total of 16 case-examples; see annex I):

"sometimes when I work, for example, I don't always have the possibility to be here at 4 o'clock, [the time] you have to be around [...] to be able to have the dinner ready. [So] maybe I do something else, or instead of one day of cooking I take three or even four shorter days; or maybe late in the evening I can prepare the food for the next day" (Interview with T.U., 2014).

She concludes by saying that "we talk about this, we have flexibility" (Interview with T.U., 2014). It is this flexibility that she and the two other interviewees from the same community find appealing and motivating in their current living setting. A degree of flexibility in the functioning of cohousing is advised by UK interviewees as well:

"everybody's circumstances is different, some people have big family commitments or old parents with dementia and so on; [and] it would be very wrong to say that everybody has to do exactly this and that" (Interview with J.S., 2014).

Another interviewee (from a different UK community) has great sympathy with the opinion of her fellow neighbours who think that

"we should remain flexible, we don’t want to become too rigid [...] because we are human beings, people’s lives change and you just can’t legislate for these things" (Interview with B.T., 2014).

It is this degree of flexibility that allowed another member of the same community to remain there, as he is away three months every year in India. Even though some other member did not agree with his prolonged absence, he emphasized the importance of the time spent in India
for him. He bluntly stated that "if we are going to be a community that is not going to be happy with that, then I will not come, I will leave" (Interview with M.T., 2014). In the end he found a compromise with the other residents, and is being fully committed in the community for the rest of the year in order to make up for his absence.

A degree of flexibility is important in the case of seniors, who might not be physically able to fulfil the same physical tasks as their younger counterparts anymore. According to members of a Dutch senior cohousing community, residents respect the fact that some people are unable to do certain tasks, and look for more suited alternatives in return. They exemplify this by mentioning the situation of a senior stranded in a wheelchair:

"he is [now] the man of the Internet connection and of the automatic system for opening doors, windows and so on [...] and that can get important when you're handicapped: [plus] he has experience with that" (Interview with H.K., 2014).

Another example comes from a Danish community established over 35 years ago, where two of the founders (now in their 80s) are highly valued for their presence:

"even if they are not able to work so hard anymore, they contribute with their culture and their way of talking to people" (Interview with H.B., 2014).

In the respective intergenerational community older people (such as the aforementioned couple) only do half of the work as other adults (the same way for children) in cooking groups, buying the food and helping around for the preparation of the communal meal. This degree of flexibility allowed the older couple to remain in the community for so long. It resulted in a win-win situation both for the couple and for the rest of the community, able to learn from their wisdom and experience (Interview with H.B., 2014).
Disadvantages of allowing complete flexibility in cohousing

Nonetheless, despite the importance of flexibility in the functioning of the community, a certain balance between allowing flexibility and the need for participation and involvement in the community needs to exist. Hence the term ‘managed flexibility’ used throughout this section. Complete flexibility without such a balance can have serious negative consequences, as one UK interviewee remarks:

"we let people do what they want, [...] for the moment it works fine, but if it would get only down and down and there would be only 10 people here doing anything [in common]; then we would have to be careful about that" (Interview with N.S., 2014). This could lead to situations where very few people join in, and "then suddenly there would be no community anymore" (Interview with N.S., 2014).

As another UK interviewee (from a different community) mentions, if everyone would be allowed to do as they please, without any strict commitment towards the community, "then the place would fall apart" (Interview with A.T., 2014). Accepting that people can do more during a period in their life, and less during another is one thing; however "if all are doing less, then I think it would be a problem" (Interview with H.J., 2014).

The solution adopted in some of the studied cases is to have a specific number of hours/ tasks (for the benefit of the community) that are compulsory for the residents; however to be flexible regarding the fulfilling of the quota and of other activities:

"it also depends on your life situation as [...] we don't have to give exactly the same amount of working hours to all of us" (Interview with H.B., 2014). You have to do "these four days of work per year in the working weekends, and the cleaning and cooking as I mentioned before; but for all the other groups, it depends on what you want, how strong you are and so on" (Interview with H.B., 2014).
In 10 of the studied communities (ex 16) obligatory chores revolve around cooking of communal meals and cleaning of the common premises; whereas in nine other activities besides or instead of cooking and cleaning are required. Formal obligations of some sort exist in all of the studied communities. Allowing a degree of flexibility for fulfilling the required quota appears to be the preferred solution for finding a balance between maintaining a sense of community and being receptive to people in different life situations.

6.4.2 Fostering a 'sense of ownership' among residents through an inclusive decision-making system

The term 'sense of ownership' has been mentioned in the literature as a critical element of community development (for a literature review on the topic, see: Lachapelle, 2008), resulting in "the support, involvement or commitment of interested or affected parties to a community development proposal, plan, strategy or decision" (Lachapelle, 2008, p.52). The engagement of individuals can lead to a level of commitment towards the process and the result (ibid.); a potentially important factor for the current discussion about mitigating the effects of divergent motivation priorities in cohousing. One of the main characteristics of the 'sense of ownership' in community development is, from a point of view of an individual, to have your opinions and views regarding community matters at least heard and taken into account (ibid.).

This is of importance especially in the case of cohousing, as the data analysis has shown. The vast majority of interviewees have mentioned that the cohousing setting implies that all voices should be heard, if residents choose to speak up. However, in practice it often happens that the opinions of some weight more than those of others. This is due to a number of reasons, ranging from the intimidating personality of some residents, to the influence of the 'core group', and the lack of participation and interest of others. Relevant for the current discussion is the importance of finding ways to allow all voices to be heard, especially of those who are more reluctant to speak up or are less knowledgeable in specific areas. Having their voices at least heard and taken into account, even if the outcome contravenes their opinion, helps foster a level of implication and commitment from the part of individuals. As a result, a certain
sense of ownership towards the community can mitigate the dissatisfaction arising from some divergent motivational priorities/needs.

As one Swedish interviewee remarks, if individuals

"feel that they had the opportunity to express their opinions, [...] even if after house meetings the result was not what they have wished for, they can accept the result. Because at least they have expressed themselves, and have been listened to" (Interview with E.F., 2014).

Another interviewee from an UK community considers that "a part of decision-making [is that] if you can voice something and say something, then you can let things go" (Interview with A.T., 2014). He goes on to highlight the importance of having the opinions and wishes of individuals at least heard, even if not acted upon-

"a part of decision-making, if you can voice something and say something, then you can let things go. If you are not given this chance, you will be obstructive in passing a proposal: 'I have not been heard, I am not going to let this go true!' Whereas: 'I totally disagree with it, I don’t think it is the right way to do it, but if you all agree to it, I can let that go!' So it is easier to let things go if you feel that you are heard, and you are part of the process" (Interview with A.T., 2014).

Individuals feel that their voice is valued; and another Swedish interviewee confesses that:

"it has happened many times for me that I have suggested things, and the meeting decided not to accept them; but I can live with that, because at least I was able to express myself" (Interview with K.F., 2014).

Taking into account all opinions, thus fostering a 'sense of ownership' towards the community, can represent an important commitment practice for cohousing. This is based on the importance attributed to inclusive decision-making processes in nine of the studied
communities (ex 16). In six instances, the preferred solution is to divide individuals in small groups, allow for discussions and try to reach common conclusions in that setting, bringing it to the plenum only after that. In a Swedish community such practices are called 'sofa meetings', where:

"we discuss a specific topic amongst ourselves, trying to hear everybody's opinion; we don't decide anything at that occasion, but we try to reach an agreement and we decide later, when it comes up at the big meetings" (Interview with E.F., 2014). The advantage of such a practice is that it allows "everyone to express their opinion; [especially those] who don't want to speak at house meetings, for natural reasons" (Interview with E.F., 2014).

In order to be sure that all opinions are taken on-board, "even during these sofa meetings we try to break up that meeting so that you [each individual] can speak in smaller groups" (Interview with A.F., 2014). This practice that has the added benefit of 'immerging' residents in important or controversial topics:

"if we have a question which is really, really hard and we have lots of opinions about it; [...] we talk and talk and talk and listen to all opinions around us and if it is much to say, then perhaps we need to have more sofa meetings" (Interview with A.F., 2014).

A similar approach is used in other researched communities as well, thus allowing the opportunity to "hear all the voices, and not only the voices of the people who can speak well" (Interview with D.P., 2014). If there are "problems and difficulties in finding a good solution, we try to split so that you sit and talk about issues in smaller groups and there everybody has to say something" (Interview with D.P., 2014); an approach aimed at achieving a degree of consent among residents.

Furthermore, in order to get help in difficult situations, it is not uncommon for the researched communities to hire external specialized advisors. In one UK community, they "brought in [...] a couple of consultants and had some sessions about reaching consensus and tried to take on board the suggestions they made" (Interview with M.S., 2014). In a Swedish case, due to serious "problems among groups", one Norwegian person (expert in the field of civil disobedience) was hired to help them reach a consensual way of living (Interview with D.P., 2014).
6.5 Conclusions of the chapter

The first research question discussed in this chapter dealt with the motives of residents for participating in cohousing. The findings from this study are concurrent with the ones from past research on the topic. The main motive for participation mentioned in the literature is also common for the vast majority of interviewees from this study (enhancing community, while maintaining privacy). Additional motives for participation mentioned by interviewees are also congruent with findings from previous research: this study did not determine any significant additional motives for participation compared to those from the studies of Jeske (1992), Sullivan-Catlin (1998), or Choi (2004; 2013).

The influence of the motives for participation in cohousing on the long-term success of communities is a topic barely mentioned in cohousing research so far; and as such represents an important contribution of this study to the knowledgebase on cohousing (second and third research questions of this chapter). This study showed that the main motive for participation mentioned by the vast majority of interviewees influences the level of interaction and the subsequent development of bonds between residents; and through them the fulfilment of the further social and practical motives for engagement mentioned by interviewees (due to the existence of only informal support networks in cohousing, concurrent with its scope). Additionally, the findings have shown that unrealistic expectations (regarding the level of support) and material considerations as main motives for participating in cohousing can have negative effect on communities.

It is important to note that the findings discussed in this chapter conform to the premises of social capital theory vis-à-vis community development: that higher levels of interaction/engagement lead to the development of trust, reciprocity and bonds between residents; which in turn positively influence the social cohesion of the group. These results are in line with Poley’s findings regarding the higher social capital in cohousing, compared to US averages (Poley, 2007).

Furthermore, it must be mentioned that the findings from this study can also be seen from the point of view of DeFilippis’ (2001) interpretation of social capital, who takes into account issues of power and conflicting interests between individuals and the larger group (DeFilippis, 2001). Concurrent with DeFilippis’ amendments to social capital theory, most
communities part of this study make use of some practices aimed at safeguarding the community from the negative effects of individual interests (through waiting lists, interviewing of prospective members, 'external' members, and 'first-buy' options for members of the community).

The third research question from this chapter addressed the impact of divergent motivational priorities in cohousing; validating two of Sullivan-Catlin’s four ‘commitment’ mechanisms (‘communion mechanisms’ and ‘reciprocity’). The other two (investment and subgroup formation) are not supported by data from this study. This does not invalidate them; it just means that a study with a specific focus on these issues would be required for further clarifications. In addition to the four mechanisms mentioned by Sullivan-Catlin’s study, two new mechanisms (labelled as ‘practices’ aimed at lessening the effects of conflicting motivational priorities) have been determined by this study: allowing a degree of ‘managed flexibility’ in the everyday functioning of the community in order to cater for people in different life situations; and fostering a 'sense of ownership' among residents through an inclusive decision-making system.
Preliminary research undertaken during the first year of this study, together with the review of relevant literature, highlight the participatory process of the development phase as an important factor shaping cohousing. The literature mentions the importance of this process in developing a community that suits the needs and desires of the initiators; and indicates its positive influence for creating a cohesive group. At the same time, existing studies highlight the commitments and potential barriers inherent to the process. Nonetheless, there are some gaps in the knowledgebase on the topic; the most important one being the lack of primary studies investigating in-depth the impact of the various development models on the success of cohousing. In order to help address this gap, three research questions have been devised:

*How are cohousing communities being developed?*

*Does the development process affect the cohesiveness of cohousing?*

*What are the barriers and enablers for the development process of cohousing?*
This chapter will be divided into five main sections. The first one will investigate the development stages of the studied communities, and categorize them based on their development model.

The second main section will examine the positive implications of the participatory process underpinning the development of the studied communities (second research question of this chapter). The next two main sections will discuss the last research question of this chapter: the third one will investigate the barriers linked with the participatory development process; whereas the fourth one will look at solutions for these barriers, focusing on a partnership with an external developer and on support from local authorities. The last section will present the conclusions of this chapter.
7.1 The development stages and models of North-West European cohousing

Prior to examining the effects of the development process on the cohesiveness of the studied communities, it is important to discuss how this process works, and what it implies. Therefore, this section will deal with the first research question of this chapter:

How are cohousing communities being developed?

The data analysis reveals three main stages in the development of the studied communities. Furthermore, based on a classification by Williams (see Williams, 2008), the studied communities can be divided into three models of development.

7.1.1. Stages of the development process in cohousing

a) The initial stage

The data reveals that the development of all but two (ex 16) of the studied communities was initiated by a core group of people interested in living in a cohousing setting (this exception will be discussed later in this section). They were either groups of friends/acquaintances, or people with a common desire/vision getting together; the former situation being more common among the studied communities. Representative for the latter situation were the people taking part in the participatory process of a senior Dutch community, who “didn’t know each other so well, because [they] came from different parts of Holland and from different social atmospheres” (Interview with H.K., 2014). The initial group starts developing a common vision based on their needs and desires, which can be later formulated in a written mission statement (the basis of the future community):

“this community in particular, I heard about it because of a friend. She had dinner with other friends whom I didn’t know, and they were talking about what will happen from now on, [...] we wanted to start a new life. So we were talking around the table, having dinner and drinking good wine and then we started to write down what we really wished for” (Interview with A.F., 2014).
This phase can also be initiated by an external developer, in case a partnership between the core group and an external developer is formed. This has been found in only one case among the researched communities. Another researched community was initiated rather as a top-down approach of the local municipality; with limited input of the residents (see next section for the different models of development in cohousing).

b) The forming stage

The next step is to attract interested people to the project, and develop a core group from which the future community can emerge: “there was a group of people, I think they started with four families; and then they started to ask their friends and people from their network if they were interested” (Interview with N.L., 2014). From this stage on active involvement, as well as time and energy commitments from the part of the core group are required for the incipient project to materialize: “you can't establish values around how to do things if you don't meet and discuss and figure out what should the rules be” (Interview with J.J., 2014). Recalling the forming stage of his community, one Danish interviewee mentions:

“there were a lot of weekends we spent together. It was a core group who started this and then they advertised it and had more people coming in and then they had regular meetings and spent weekends together just to discuss and establish the details about this community” (Interview with J.J., 2014).

Similarly, a Dutch interviewee remembers that “at first we were a group of willing people with a lot of funny ideas; and afterwards we became really a ‘body’, that had to function as a ‘body’ [organization]” (Interview with H.K., 2014). In the researched communities, the main aspects discussed and established during the participatory process were:

- the ‘values’ on which the community will be based: “before getting more people together to join us, we have actually tried to lay out some values, like a mission statement; [...] so that people can see- do I want this, or is it actually something else I want?” (Interview with L.L., 2014). Establishing such values from the onset represents in the view of eight interviewees a key part of the participatory process. As one of them highlights:
“it is important to have some common ideas regarding what you would like the community to be based on; if you are just moving in without any general or common views on this, then I think it could be a lot of problems in the beginning of the active part of the cohousing community” (Interview with O.U., 2014);

- the design of the community and the layout of the site (in case of the multi-dwelling communities): “it is important to mention that it was very consciously done, because the building company, the architect and the people who were going to live here planned it together” (Interview with L.F., 2014), remarks a Swedish interviewee from a senior community. Referring to the process itself, another interviewee from the same community remembers that

“we were planning, we were sitting with this 'building group' [architects, engineers etc.] at least once a month for three years. And it was great, because we talked about colours, walls, materials and how we wanted it to look like; so after that, they started to build the house and it became the way we wanted it” (Interview with A.F., 2014).

A similar statement comes from a Dutch community, where one of the initiators recalls that they “had meetings with the architects, builders, and [...] could say how we wanted it to be and so on; [and] it took five years [the whole development phase] to prepare” (Interview with J.R., 2014). This stands true for another Swedish community as well, even though “in the very beginning, [their current] dwelling was designated as a standard house” (Interview with A.D., 2014). Their partnership with the developer (a municipal housing association owning their current building) meant that the future residents were able to influence the eventual layout of the building as part of the participatory process:

"the cohousing [group] had a very big influence on the design of this building [...]. This is how we got the common rooms downstairs, and I also think that some flats were changed from two rooms to one-room apartments; anyways, the cohousing association had a very big influence on the design of this building” (Interview with A.D., 2014);
the shared activities in the community: Shared activities are an important part for establishing a sense of community in cohousing (see motivation chapter). As one Swedish interviewee remembers,

“we decided on a lot of practical things like the cleaning groups, the cooking groups and so on; so details about our everyday life in the community” (Interview with L.F., 2014).

For the 13 studied communities (ex 16) practicing community-wide common meals, debates around their frequency and organisation represented an important discussion point during the participatory process. As highlighted by a Danish interviewee,

“the point here is that we created this [community] ourselves by talking to each other; and right from the beginning the main talking point was the fact that we had to eat together. It has never been a question [of doing otherwise]; actually it was the only thing we could imagine before we moved in here, that we have to eat together” (Interview with L.A., 2014);

-the formal organisation for managing the community: Another important aspect shaping life in the future community is its management. As one interviewee indicates, as part of the participatory process

“we have spent six months or a year discussing how to make decisions; but once we have decided that, it has just stayed like that […], so you know how it works and what to expect” (Interview with L.A., 2014).

According to a Swedish interviewee, there is a lot of processing to do in this regard: “what should the board decide, what should be decided at house meetings […], who makes what decisions and so on” (Interview with A.D., 2014). Furthermore, the compulsory work needed to be undertaken by residents for community purposes, such as cooking, gardening or maintenance of the shared facilities, is decided during such talks;
- the communal facilities available to the residents: Communal facilities represent a key part of cohousing, according to the literature and the findings from this study (see motivation and design chapters). As one Danish interviewee remembers,

“we had so many ideas, like a place where to fix our bikes, or a place to put a sewing machine; [...] in the end we used all the space available to us” (Interview with T.A., 2014).

Shared facilities are customized in the researched communities based on the needs and desires of the core group of residents, as such: communities comprised of a large number of families with young children possess a plethora of facilities for children; communities with residents interested in self-development possess dedicated spaces like a communal meditation room; and senior communities have facilities specifically catered for their needs, like specific storage spaces for electric scooters;

- the complete project management in the case of the ‘resident-led model’ (see next section)-site searching, planning, financial, and ownership issues: If external support for development is unavailable, the weight development process falls in totality on the shoulders of the future residents. This can be quite a complex undertaking, as one Dutch interviewee highlights:

“when we decided that we go on, we put up the statute and also the inner organisation. We divided tasks already from the beginning- for the PR, that was a heavy job in the beginning [...] and we had a board, and all kind of little groups that were looking at the different parts of the needs” (Interview with H.K., 2014).

When building choices had to be made, the future residents of the respective community also developed a building team working closely with the architects and engineers for defining the layout and design of the future community (Interview with M.K., 2014). In the case of a
partnership with a developer, the latter usually becomes responsible for such technical aspects.

The next step in the development of the studied communities entails the creation of a legal entity by the core group, in order to represent them when dealing with local authorities, site owners/estate developers, banks, lawyers, governmental agencies etc. As one Dutch interviewee remembers, creating a legal structure allowed the group to move on ‘to the final stage’ of the process, and begin the preparations for the actual physical development of the community:

“when there is land to give out, you really need to have a formal structure, [so] we started as a [company] with the future inhabitants that would like to live here; [...] and when you are a legal entity, you can enter into the circuits, into the system; [...] and that, they [the governmental agency owning the site] accepted” (Interview with H.K., 2014).

In all of the studied cases, bar one, the future residents have organized themselves in some sort of legal structure during the development phase. This allowed them to cope with the practicalities of developing a cohousing community. The one exception is represented by an intergenerational Swedish community from Stockholm, where the developer-led process (in this case the developer was a state-owned housing association tasked by civil servants from the municipality with developing community housing) meant that the residents organized themselves in a legal entity one month after moving in.

c) The physical development stage

The last step comprises of the physical construction of the community. This is the responsibility of a contractor hired either by the cohousing group, or in case of a partnership,
by the developer. In the latter case, in the studied communities it has happened that the developer already owned a building, modifying it to suit the needs and desires of the cohousing group.

**7.1.2 The various development models of cohousing**

The data analysis from this study reveals that the development of seven researched communities (ex 16) has been led by their residents (with help from various specialists in regards to planning, design, legal issues etc., that were contracted by the cohousing group), thus belonging to the ‘resident-led’ category. In eight other instances a particular developer has been leading the development of the communities together with the future residents; being responsible for some aspects of the development process. These developers can be divided between (former and actual) municipal housing associations; and a private estate developer, in one instance. In view of Williams’ classification (based on Davis, 2001), communities belonging to the latter case can be classified in the ‘partnership model’ category. A purely ‘speculative, top-down model’, where the developer leads all major aspects of community formation and involves the future residents “only in community building exercises” (Williams, 2008, p.271), has been encountered in just a single case among the researched communities (see table 6).

It is important to mention that from the point of view of this study, table 5 (from this chapter) and the classification of development models are not categorical. The boundaries between models cannot be considered as definitive, as in the case of some studied communities they overlap. Furthermore, Williams’ classification potentially excludes other types of cohousing development models; and as such more research is required before presenting more categorical statements on the matter. Nonetheless, the classification presented in this section serves two purposes:

- as a guideline for readers, aimed at helping them picture different ways of developing cohousing;
- and as a tool for highlighting two developmental differences noticed among the studied communities.
The data from this study reveals two key differences that can be related to different development models (besides these two, no further differences in this regard can be noticed with the available data):

- first, the ‘top-down’ approach differs significantly from the other models due to the limited input of the residents before moving in. The only example among the studied communities comes from Sweden, where two municipal officers’ initiated the project and established the broad vision for the future community. The participatory process comprised only of a few meetings with the future residents:

  “they organised meetings with people interested in living in cohousing; so we had about two or three meetings with the landlords before moving in! We were talking about what it would be like, what thoughts our landlord had about it, what we expected from this and so on” (Interview with T.P., 2014).

The frequency of the meetings during the development phase of this community is much lower compared to the other case-studies; as all major aspects of the development process (from recruiting the future residents, to the design, legal and financial implications) were managed by the developer. According to Williams such an approach can have negative consequences on the cohesion of the community (Williams, 2008); and will be explored in the next section (second research question) of this chapter;

- second, a partnership with an external developer is necessary if the financial possibilities of the cohousing group are insufficient for the physical construction of the community. An external developer (most frequently a municipal housing association for the researched communities) brings the critical technical and especially financial support needed for the physical development of the community. It eases the development process as well, allowing residents to focus more on community building, common values, and interactions in the future community (‘living systems’). In the studied communities, external developers dealt (to a certain extent) with financial issues, planning applications, and physical development. However, such a partnership generally comes with strict conditions imposed on the residents that assure the long-term feasibility of the project for the developer. It can also imply different housing tenures compared to ‘resident-led’ model (see third research question of this chapter for a comprehensive discussion).
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<thead>
<tr>
<th>Stages</th>
<th>Development models</th>
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<tr>
<td></td>
<td><strong>Resident-led model</strong></td>
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<tr>
<td><strong>Initial stage</strong></td>
<td>Initiated by a few individuals interested in the setting</td>
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<td></td>
<td>- Once a wish-list/vision/statement is established, other interested people are recruited in order to create a group of future residents.</td>
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<tr>
<td><strong>Forming stage</strong></td>
<td>Led by the future residents (with professional assistance)</td>
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<tr>
<td></td>
<td>- Critical aspects of life in the future community are discussed and decided upon: project management; community values; design and shared facilities; shared activities;</td>
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<td></td>
<td>- Creation of a legal entity to represent the group.</td>
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<tr>
<td><strong>Physical development stage</strong></td>
<td>Led by the future residents (with professional assistance/ contractor)</td>
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<tr>
<td></td>
<td>- Searching for site (unless previously owned by developer);</td>
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<tr>
<td></td>
<td>- Planning permission;</td>
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<td></td>
<td>- Financial arrangements;</td>
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<td></td>
<td>- Physical construction of the community.</td>
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Table 5: The development process of the studied cohousing communities. Source: Author, 2015 (based on Williams, 2008).
Table 6: Classification of the researched communities, based on their development model.

Legend, based on the shortcut of the term ‘cohousing’ in the respective language: BF- Denmark; KH- Sweden; CW- Netherlands; CH- UK. 

Summary of the section: The first part of this section dealt with the development stages of the studied communities, familiarizing the reader with the details of the process. The second part of this section dealt with the various models for developing cohousing; starting from the classifications of Williams (2005a; 2008). She distinguishes between three clearly-defined such models. The data from this study is not sufficient for establishing whether her classification is definitive, as some features overlap in the studied communities. Nonetheless, her classification is useful in explaining two main differences during the development phase: a difference in developing cohousing between a top-down approach and one where the residents are highly involved; and the importance of forming a partnership with an external developer if finances for the physical construction of the community are insufficient. The latter approach also allows the group to focus more on living systems in the future community, as the developer becomes responsible for some of the technical responsibilities of the development process. This will be discussed more in detail in the fourth section of this chapter.
7.2. Implications of the development process on the cohesiveness of cohousing

Once the different ways and stages for the development of cohousing have been investigated; the discussion about the impact of the development process on the cohesiveness of cohousing can proceed. This will be done by addressing the second research question of this chapter:

*Does the development process affect the cohesiveness of cohousing?*

The data analysis reveals four key positive effects of the development process in relation to the cohesiveness of the studied communities: the formation of a united group when moving in; filtering out unsure or uncommitted people; avoiding a project characterised by compromises via the establishment of some core values; and avoiding the shortcomings of the top-down approach in cohousing development. At the same time, data analysis suggests a number of threats arising due to the nature of the development process, which can affect the cohesiveness or the outright completion of the future community: extensive time and energy requirements from future residents; financial risks; and struggles with the local authorities (figure 2). These will be discussed in the next section of this chapter.

Confirming the overarching view from the literature, no fewer than 42 interviewees (ex 46) have mentioned the importance of the participatory process prior to the actual moving in. The remaining four interviewees could not answer as they only joined their communities recently, without being familiar with the different development stages of cohousing. A good example is the account of a Swedish interviewee, mentioning that the

>“process before you move in is most important, so that you really can think over what is going to happen and if this is something for you. And you get to know your neighbours even before moving in, so you are doing some kind of social planning together: you are planning not only the design, but you are planning how to live together” (Interview with K.F., 2014).”
Figure 11: Implications of the Development Phase for the Cohesiveness of the future communities.

Source: Author, 2015.
Even though 11 interviewees (from most of the studied communities) emphasize that such a process has proven to be rather difficult; the participatory process

“does bring the group together, as they have to work with each other, make decisions with each other, and it is hard work” (Interview with N.S., 2014).

As such, this section will discuss the implications of the participatory process (underpinning the development phase of cohousing) and associated development models for the cohesiveness of the researched communities.

### 7.2.1. The formation of a united group when moving in

Within the researched communities, 28 interviewees (ex 46) emphasized that the participatory process has positively affected the initial cohesiveness of the group after moving in. The future residents take part in meetings discussing, evaluating, and trying to reach common conclusions on the major aspects of their lives once they move in the community (see previous section for an overview of the specific issues discussed during the development stage).

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**Figure 12:** Positive effects of the participatory process on the initial cohesiveness of cohousing.

The data analysis reveals two important considerations linking the participatory process to the initial cohesiveness of communities: the efforts of the future residents to reach common solutions; and overcoming difficulties as a group.

a) The effort to reach common solutions

The data analysis reveals that striving to reach common solutions (regarding the important characteristics of the future community) represents the first stage in the formation of a cohesive group: “I think that it is important that when you move in you have had all these discussions and have some kind of common ground” (Interview with J.G., 2014). According to a Swedish interviewee, the participatory process required extensive involvement from the part of the future residents; however it was a key process that affected the development of the group:

“I think that a process before you move in is most important, so that you really can think over what is going to happen and if this is something for you [...]. As I said, I personally only took part in the last six months of the development process before moving in here, but there were lots of small groups who had responsibilities for one or more areas. And it was like a house meeting system even before moving in; everyone was welcome to such meetings and it was important to take part at this stage and discuss things” (Interview with K.F., 2014).

The importance of reaching some kind of common ground before moving in cohousing is emphasized by another Swedish interviewee (from a different community), mentioning that “the participatory development process is important [...], it is important to have some common ideas regarding what you would like the community to be based on” (Interview with O.U., 2014). In his view, a ‘top-down’ approach could result in serious issues regarding cohesiveness (at least) in the initial stages after moving in (Interview with O.U., 2014).

This argument is also reflected in the opinion of an interviewee from a 30-year old Danish community, where the future residents have decided during the participatory process to have
communal dinners every day of the week. This practice that has been going on since the community was built:

“you can't establish values around how to do things if you don't meet and discuss and figure out what should the rules be. It is rather drastic to decide to dine together every day of the week and you need to reach a consensus on that” (Interview with J.J., 2014).

One Dutch interviewee extrapolates his experience with group forming from a political party to the cohousing situation, highlighting the importance of bonding, soft-skill development and receiving external, professional assistance:

“I think when you start, you should really have a very intense process; because it is not really a small decision to decide to go to live in cohousing. It's all-in! I think it is important also as a group bonding experience and I think that if you can, you should also seek external trainers or advisers in group processes, who can guide you as a group” (Interview with J.W., 2014).

Furthermore, summarizing the participatory process, an UK interviewee mentions that for the core group who developed their community, “at one point it helped even if we didn’t achieve [to physically build the community]: it is the journey, not the destination” (Interview with M.T., 2014). That is because the participatory process is “very important […], for teambuilding, exchange of ideas, getting to know the others” (Interview with J.R., 2014); therefore positively affecting the development of a united group of future residents.

As one Dutch interviewee summarizes, the process affects the initial cohesiveness of cohousing communities by giving them the chance for a better start:

“that [the participatory process] makes a difference, I think, in being a group; forming a kind of a group, and staying together” (Interview with M.K., 2014).
**b) Overcoming difficulties as a group**

Tuckman’s model describing the development stages of small groups has been widely used, and has been highly influential in human resource development studies (Bonebright, 2010). The model was originally comprised of four stages (later a fifth one was added) that characterize the development pattern of small groups:

- the forming stage, when relationships with other group members and/or leaders are established;
- the storming stage, a time of conflict inside the group and/or between the group and external individuals;
- the norming stage, when the group starts to develop cohesion and establish the roles and norms for working with each other;
- and the performing stage, when the structural issues have been resolved, and the structure supports the achievement of tasks (Tuckman, 1965).

Of importance to the current discussion is the cohesiveness that cohousing groups overcoming the storming stage acquire; as “irrespective of the ultimate success of the finished homes and community amenities, the storming stage represents a fundamental stage of 'maturation' from which some groups might never emerge” (Jarvis, 2011, p.571). Interviewees from all but one of the studied communities (see first research question and the remainder of this section) have mentioned the challenges of the participatory development process (the exception is a community developed through a top-down approach): the efforts, commitments, and sometimes financial risks required in order to make their cohousing community a reality.

In view of Tuckman’s model, this implies that they have gone through the ‘storming’ phase together, which increased the cohesiveness of the group. For example, one interviewee highlights Tuckman’s model; mentioning that in order to perform, her cohousing groups had to go through the storming phase:

“the theory is that unless you have done the storming part and you really engaged, you don’t get to the performing; and although it was very painful, [...] one should not underestimate what a painful process it is, as well as exciting and so on. It led to the creation of a strong, committed core group” (Interview with J.S., 2014).
In case of a quarter of the studied communities (4 ex 16), the cohousing group had to go through an especially challenging ‘storming’ phase during the participatory process. Having to face difficulties together further strengthened the group. Such difficulties were created because of hostility from governmental planning organizations, or due to financial reasons. One Danish interviewee recounts the difficult situation in her community, where right before finalizing the plans and beginning to build,

“everything went bankrupt: the company building it went bankrupt, the company that was making the garden went bankrupt [Author’s note: the bank who gave the loan for the development went bankrupt later as well]; so they [the core group of future residents] took over the whole building and they hired tradesman themselves, they hired carpenters themselves and so on. So that was something that really brought people together, the fact that they had to solve this problem and get this community built” (Interview with N.L., 2014).

In the UK especially, the lack of tradition in developing cohousing meant that about a decade ago, preconceived ideas on the part of planning agencies seriously impeded the development of two studied communities. In one case,

“the council turned down the planning applications three or four times, and some of it was very clearly politically motivated. One of the conservative councillors and this is on record, said: ‘why do they want to eat together, how can people live like that, of course we cannot allow it!’ So there was a suspicion to begin with regarding what sort of community are we, are we like a commune, some kind of religious cult and so on” (Interview with M.S., 2014).

A similar situation has been encountered in the case of the other UK community as well, where the initial site they were set to buy was sold to someone else due to the preconceived conceptions of the owner and neighbours. The cohousing group also encountered hostility from the planning officers, who turned their application down several times: “we didn’t get
planning; we had to [...] work with a private housing developer; that took four years” (Interview with M.T., 2014).

In both these cases, the respective communities could only receive planning permission by applying as sustainable and educational centres. This required significant time, energy and financial efforts from the part of the future residents.

Nonetheless, overcoming such a particularly challenging ‘storming’ phase led to the creation of a strong and united group; something that a member of one of the above communities emphasizes:

“When I saw the people here; this was a group of people who I could see that work together, were committed together and could go forward. When I met people from different cohousing groups, I didn’t necessarily think that they had that much in common. It was not going to be an easy process to get to the same space where [our community] has gotten to” (Interview with A.T., 2014).

Therefore, if future residents are able to overcome the difficulties arising during this stage, it can have a positive impact on the initial cohesiveness of the communities. Nonetheless, this does not rule out external support as an important factor that can positively affect the outcome and cohesiveness of cohousing development. If there are insurmountable financial barriers for the future residents to overcome; then the physical development of the community will largely depend on receiving support from an external developer. However, with the exception of the top-down approach to cohousing development (as noticed in the only studied community using this approach), this does not mean that the process becomes unimportant. Even with financial and/or technical assistance from a developer, the participatory process usually implies disagreements among members; and important time and energy commitments for the cohousing group. A more comprehensive examination of the matter will be part of a discussion later in this chapter.
7.2.2. Filtering out unsure or uncommitted people

According to 17 interviewees (ex 46), the participatory process acts as a filter for people who are unsure about living in cohousing or committing to a certain project. This has a positive effect on the initial cohesiveness of the community, as it ensures that: residents are familiar with the project and its characteristics; and that they have the chance to decide whether it is something for them or not even before moving in. As one Danish interviewee recalls, the participatory process

“soothed each other down; it would have been a lot different if we have all showed up here on day one, and that would have been the first time we would have met. So when you believe in an idea that you have to fight for, you care more about it; that's the basic [point]” (Interview with T.A., 2014).

Another interviewee and founder of an UK community emphasizes the role of the participatory process for the cohesiveness of his community, mentioning the positive side of this time- and energy-consuming process:

“it is a lot of work and requires a lot of commitment, so you have to come at weekly meetings and weekend meetings before moving in; so in a way that acts as a filter, you have to be willing to come to the meetings to move in. So in a way it keeps people who are committed; I think basically it makes it harder to join the community and I think that is useful, so you actually get more committed people” (Interview with M.C., 2014).

Furthermore, the commitments required from the part of future residents can discourage the ones attracted to cohousing for more material considerations:

“I think the real benefit of the meetings is that they act as a filter to make sure that people who join are actually committed to the idea;[as] it would be very easy for people to join us just to have a nice river view [...] a warm house, with low heating” (Interview with M.C., 2014).
This has been noticed in the case of a Swedish community as well, as one senior interviewee remembers:

“that time [spent for the participatory process] is a very good filter, because some people say: ‘Oh, do I have to clean the house? No, I don’t want that’. So you filter the ones really interested in living like this, from the ones who are not so sure. I think people think they are sure because it is a very nice situated house and they have the possibility to come in to that house; but when they realise that they also have obligations, they might not be so sure anymore” (Interview with L.F., 2014).

Interviewees mention three main reasons for people dropping out during the development stages are:

- the disagreement with some of the values of the future community;
- the lack of commitment due to realisation that the setting might not suit them;
- the lack of financial means when investments are required (the latter point will be discussed in the next section of this chapter).

As one senior Swedish interviewee summarizes, the future residents “get to know each other, they agree about how they want it to be done once they move in, they decide about rules; and the people that feel that it is not for them, they fade out” (Interview with E.F., 2014). A similar opinion regarding the ‘filtering capacity’ of the participatory process is expressed by a Danish interviewee, who notices that

“in the four-year process, there were a lot of people that left and new ones came in; because they figured out that is not for them or that they do not like one value that most people have in the group” (Interview with H.J., 2014).

A Dutch interviewee agrees, noticing that if you start a cohousing project, “it is your identity; [...] and] because the scale of doing things together is different here than in other projects, if that fits better, you have to choose that” (Interview with E.H., 2014). Exemplifying this point,
one UK interviewee details the disappointment felt by some individuals wanting more emphasis on community life during the participatory process of his community:

“some people may have felt disappointed as it wasn't what they thought it was going to be. But I think that is more socially, rather than to do with the architecture or the building; the social/community side of it might not have met some people's expectations” (Interview with N.S., 2014).

Nonetheless, it is when a ‘line in the sand has to be drawn’ and serious financial investments are required, that the commitment of future residents is ultimately tested: “at a certain point we had to draw a line and after that everybody had to get serious; [...] we had to put in a lot of money [...] to pay the architect, he was like- I believe in you, [...] but I need the money" (Interview with L.A., 2014). At that point they

“needed people to really say if they are in or not. And that was kind of a breaking point; [...] after that it got really serious: ‘do you want to get a fixed price for that from the manufacturer or not?’ And it was like 40 million Danish crowns [author’s note: about 4 million British pounds for the whole development]; and it was kind of a miracle that it didn't go wrong” (Interview with L.A., 2014).

This serious financial commitment acts as a final filtering point during the development phase; and is acknowledged by two interviewees from another Danish community as well. One of them mentions that in their case, “there were lots of people who were initially interested [and later opted out]; for example we started as number 22 on the list out of 25, and we moved to number six in a period of six or maybe eight months” (Interview with M.G., 2014).

Although the need for serious financial commitment has been responsible for some drop-outs, turnover (during the development phase) has also been noticed in partnership schemes where the financial contribution of the future residents was more symbolic:
“you had to put up a sort of deposit, for example I paid for my one-room apartment 12,500 crowns [about 1000 British pounds] for this deposit; but that is nothing compared to the costs of developing it yourself” (Interview with K.D., 2014).

Even in such a case, one Swedish interviewee mentions the turnover during the development phase of his community:

“from the first meeting we had, not more than half of us moved in. The rest [who were at the first meeting] gave up; they thought that perhaps it is not for them. And I know other groups, they started with 20 members discussing and organising; and when everything was ready to move in, there were maybe three or four left from the original group. Others had come, but many had left” (Interview with T.P., 2014).

The same situation has been reported by a resident of another Swedish community developed with significant input from a municipal housing association, who mentions that “you would need [...] three times the number of members more than the one needed to move in because there are dropouts all the time; you need more members during the planning phase, because people are dropping out” (Interview with O.U., 2014). Without going into specifics, a Swedish interviewee (from a different community than the above two) summarizes the turnover encountered during the development phase by stating that

“so many things happen in everyone's life, so you really can't be sure that you will move in [...] and so you have to accept that people come and go for many different reasons” (Interview with K.F., 2014).

Whether such high turnover (as in the above three cases from Sweden and Denmark) is representative for other studied communities as well cannot be determined with the available data. Nonetheless, some degree of turnover during the development phase is to be expected, even when development costs are low. This is because of the disagreements regarding some of the values of the future community; or because of lack of commitment from the part of
some individuals who realised that the setting might not suit them. Consequently, it can be stated that the participatory process can filter the people committed to cohousing (or to the development of a specific cohousing community) from the ones who are unsure.

7.2.3. Avoiding a project characterised by compromises via the establishment of some core values

Developing a cohousing project starting from a number of key core values is considered by nine interviewees as an important effect of the participatory process, positively influencing (at least) the initial cohesiveness of the community. In the studied communities, such values can be categorized as:

- the desire for an enhanced social life and sense of community;
- sustainable living (albeit ‘light green’ for most communities);
- flexibility, open-mindedness, and tolerance;
- a similar vision about the raising of children;
- mutual assistance in case of seniors;
- or, less frequent, being a model for the outside society, and spirituality.

This practice has been applied in 15 (ex 16) of the studied cases. In only one case the core group of future residents has chosen to remain fully flexible regarding initial values, and let things work out by themselves as they go along. The former approach is preferred in cohousing, and one interviewee and founder of a recently-emerged Danish community explains why:

“the first thing we tried [...] was to have a mission statement; and to have a few, but essential things, written down and already decided upon. So we didn't want to have a lot of people wanting just a little bit of the same, that would have meant it would have become a 'watery' project [full of compromises]; instead we decided upon something. So if you want to do something radical and in one direction, you have to decide it from the beginning and then recruit from there; you cannot get a lot of people together first,
and then decide something really extraordinary, something special! Because then you would have to cater to everybody, and that is not possible; [...therefore] when we recruited people, we told them- read this, and if you think it is your kind of place then choose us, otherwise choose something else” (Interview with L.L., 2014).

Her opinion regarding the importance of establishing core values in order to avoid a project characterized by compromises is shared by two other Dutch interviewees living in communities with a long history (both developed over two and a half decades ago). One of them emphasizes the role of such core values as the base for creating an identity of the future community:

“the starting group, they are giving their feelings and their thoughts, it is like a costume- it either fits you or it doesn’t; [...] so if you want to live like this, then you have to have a connection with it, otherwise- please choose another project” (Interview with E.H., 2014).

Furthermore, establishing such an identity from the onset of the development phase means avoiding the risk of having too many divergent opinions regarding core values later:

“the core group has to give lines to the other people, and they have a program and they put a stamp on it- ‘This is our program; and it’s for other people who connect with this, otherwise they have to find another group’. If with 50 people you start discussion about the programme, it will change, and you will never get to do it. And after five years, you will still be in that [stage of the] process; it will never end, so don’t do it please” (Interview with E.H., 2014).

An UK interviewee agrees with this opinion, further highlighting the positive impact on the outcome of the future community in case some core set of values are decided and ‘set in stone’ from the very beginning of the development process:
“it could be a smaller core group that would define the outlines about the vision [...] - ‘this is more or less carved in stone, because this is what we want to go for, and we select the people who are fitting with this suit.’ Instead of finding new people and then developing a new colour of the ‘suit’ that could change over and over again; and it could probably lead to the disintegration of the community in the end. So I think the community at the start should have a clear outline about their ideology and about what they are trying to strive for, and find people who have an enthusiast feeling about their vision. That would probably be a better exercise than putting people together, then thinking-‘it would be nice to do something sustainable together’; and in the end they don't know what they are going into” (Interview with M.C., 2014).

The above viewpoints are validated by the example of the only researched community where the initiators decided to have a highly flexible approach. They decided not to have even some core values set in stone from the beginning of the development phase. According to one interviewee from the respective community, the two initiators of the project

“said that for them it was very important that the project was sort of an 'empty vessel', that it wasn't their vision that everybody should buy into; it was more- well, get on board and we will work it out together as we go along” (Interview with T.G., 2014).

Such a complete bottom-up initiative is commendable, even though another interviewee recalls that in practice things proved to be less flexible and ‘bottom-up’ than in theory (mainly due to the influence of the initiators) (Interview with M.G., 2014).

Of importance to the current discussion is that this ‘empty vessel’ approach seems to have backfired in the respective community after seven years since people started moving in. According to one knowledgeable resident, at the time of the interview the community risked to be split in two roughly equally sized groups; one looking at increasing the emphasis on socializing and shared activities within the community, and the other one keen to maintain the status-quo (Interview with J.G., 2014).
Core values

- Community
A modern community where we gather with the belief that more interactions with the neighbours are more rewarding. How the community is helping to make our lives easier and better. Community must never be troublesome and never forced.

- Democracy
Democracy is the foundation of the cohousing community. Decisions about the community and common areas will be taken in a democratic manner and must be respected accordingly. All might sometimes experience that they need to accept decisions they might oppose. There will always be cases where individual families have to pay for things that they themselves don’t necessarily use.

- Participation
The dream to live in a place full of life, initiative, enthusiasm, based on participation. A prerequisite is that the individual has a desire to contribute in building a playground, to be responsible for the vegetable gardens, to arrange football matches etc.

- Working groups
In order to get the community to function practically, some working groups are made responsible for different activities. For example, a kitchen group, a children's group, an activity group, a design group and so on. The groups are formed as the need arises.

- Openness
To live so close to each other requires openness to new and different ways of doing things. In this way, we believe that we can lift the world beyond our own community.

- Everyday
One of the key elements is the communal dinner that will both relieve the family in everyday life and create a foundation for a functioning community. It is through the daily contacts that interest in, and awareness of each other occurs. Traditions such as anniversaries, carnivals, midsummer celebration etc. create a better connection with the place and each other.

- Children and adults
The community is designed for both children and adults. There must be playgrounds, sports fields, and a children's room in the common house. But we also want to enhance the life of adults as well, for example through flexible office facilities, hobby room, beautiful surroundings, etc.

- Sustainability
Sustainability is a key word for us. Without being fanatic, we will strive to ensure that neither the physical environment, (i.e. houses) nor our daily chores like cleaning, laundry, etc. impact the environment. We are not an environmental community, but rather a community with a green consciousness. We aim for our food served at the communal dinners to be organic, and we will try to get agreements with organic suppliers.

- Shared facilities
Our common house is everyone's responsibility. It is intended as a "multi-purpose house", and the setting for the communal dinners and other joint activities. There will be a playroom for the children, perhaps a workshop for children and adults. The house can also be used as a shared office space in the daytime for those who work at home. Besides the common house there are common areas that we all have a responsibility to help build and maintain. There will be a playground for children and the young at heart; and a vegetable garden for shared use and for animals like chickens and rabbits.

Figure 13: The mission-statement of the Danish cohousing community Absalon’s Have. Source: Absalon’s Have official website (translated from Danish), 2015.
Although the eventual outcome of this emerging conflict remains to be seen, the size of the two divergent groups and their different priorities negatively affected the cohesiveness of the community as a whole (according to interviewees). If left unchecked, it could have serious consequences in the long-term. This example strengthens the overall view discussed in this section regarding the importance of a fixed set of core values as a prerequisite for developing cohousing. These values are decided and agreed upon among future residents due to the participatory process preceding the physical building of the community.

7.2.4. Avoiding the shortcomings of the top-down approach in cohousing development

The speculative model described in the previous section implies a top-down, developer-driven process; with more reduced resident input compared to the other two cohousing development models. In one of the studied communities, the developer very much preferred such a top-down approach for the development of the community, as one UK interviewee recalls:

“the managing director of the development company that bought the land and set the whole thing in motion,... considered that] it is better to involve people as little as possible. He found it very frustrating that we all had our ideas and we all wanted to contribute; so that means he couldn't push it the way he wanted it” (Interview with M.S., 2014).

Such an approach appears to be a potentially easier, less costly, and faster alternative to the other two models (Interview with J.S., 2014; Interview with A.F., 2014). However, according to eight interviewees, the lack of a proper participatory process in this case negatively influences cohesiveness and can have long-term unfavourable effects on the community. In the view of one senior Swedish interviewee, the apparent initial advantages of the speculative model (from the point of view of the developer) are counterbalanced by long-term shortcomings affecting cohesiveness:
if “you have jumped over that [participatory process], you first build a house and then you put people inside; that means that further on you get problems […]. So I think that even if it is a little bit more expensive for the owner, in the long term it is worth it [the participatory process]; and for the group of future residents as well, because it becomes more of a group” (Interview with A.F., 2014).

Even more illustrative in this regard is the example given by an UK interviewee. She compares the development process in their community, done in partnership with a developer, to the more top-down approach taken by the same developer with another community:

“it is most interesting if you talk to […] the developer here, he says himself that he set up two different things: here, and for him it was a nightmare as everybody had their own opinion; and then he said that he won't ever develop something like that again. And so he set up something else which is called 'co-flats', in town; it was a chapel which he reconverted, and he decided on the rules[…] and when it was all built he asked for people to come in. And then they came in, and he's the first person to admit that there isn't really a community sense over there! Somebody from here actually moved down over there; I was talking to her yesterday and she said that actually half of the people are interested, and they form a little community, and the other half are not interested at all” (Interview with J.S., 2014).

She further adds that this top-down process appears as an unnatural approach for developing cohousing. This view is based on her experience with South-Korean groups who visited her community every year, looking for inspiration in developing their own cohousing communities back home (Interview with J.S., 2014). She mentions that such emerging communities in South Korea already have the physical space built, usually as flats in blocks with communal spaces/functions. South-Korean visitors are looking for advice in filling them, so as to create a working cohousing community:

“they were saying to us- ‘could you give us some advice? Should we have like one old person, one family, one middle age and so on?’ And it is so different, this idea that you
build something and then you say- ‘that person goes there, that person goes there and so on.’ It is the opposite of what you are talking about [participatory process], and I don’t know whether it is working for them or whether it will work, […] because part of the thing of cohousing is this group process” (Interview with J.S., 2014).

This perspective regarding the disadvantages of a speculative, top-down approach to cohousing development is additionally strengthened by the statements of two knowledgeable interviewees. One of them is the founder of an UK community, and the other one chairman and long-time member of a Swedish community. According to the former,

“if you look at the […] McCammant and Durrett model, they emphasise that you need to participate; but actually what is happening in reality is that the company does all the project management with no inputs from the group” (Interview with M.C., 2014). The Swedish chairman highlights that “if you are just moving in without any general or common views on this, then I think it could be a lot of problems in the beginning of the active part of the cohousing community” (Interview with O.U., 2014).

The importance of having a genuine participatory process before moving in is also underlined by a Swedish interviewee, member of the only researched community developed through a speculative approach. He mentions that about three decades ago when the community was formed, he would have preferred a much stronger say in all aspects of the future community before moving in:

“I think maybe a couple of years of talking about it, coming together and discussing things would be preferable compared to what we had; because we had not much to say about anything, so everything was more or less given when we moved in” (Interview with T.P., 2014).

As a result the residents had to create the group feeling after they have moved in: “we just came here and tried to do the best of it” (Interview with D.P., 2014); practically going
through the struggles of a ‘delayed’ participatory process. Given the longevity of the respective community and the satisfaction of the interviewees, things appear to have turned out well in their case.

Considering the previously mentioned UK example, the statements of other seven interviewees, and the considerations of the relevant literature (see: Williams, 2005a; Williams, 2008); a top-down, speculative approach seems to represent at minimum a ‘risky proposition’ in terms of cohesiveness of the future community. Therefore, one of the positive implications of having a participatory process before moving in cohousing is the possibility to develop a cohesive group, thus avoiding the shortcomings of the speculative model.

Summary of the section: This section has dealt with the positive consequences of the participatory process underpinning the development of the studied cohousing communities. This process represents an important factor in the development of cohesive communities; usually taking years of involvement from the future group of residents. Because of that, it greatly helps in the formation of a united group due to: the constant interactions among future residents before moving in; the need to find consent in order to create a functional community; the possibility of overcoming important difficulties as a group, if they arise; and the possibility of filtering out unsure people or people who do not fit (with the values that are predominant) in certain communities. Furthermore, the participatory process helps avoiding: a project characterised by compromises via the establishment of some core values; and the shortcomings of the top-down approach in cohousing development in terms of initial cohesiveness.
7.3. Barriers for the development of cohousing

The previous section has discussed the positive impact on the initial cohesiveness of the researched communities of a genuine participatory process. At the same time though, 27 interviewees (ex 46) mention the difficulties that the future residents encounter during such a process. Furthermore, a quarter of the studied communities had to face significant issues during the development phase, having to deal with planning refusals due to preconceived ideas, planning restrictions due to conflict with local authorities, or the bankruptcy of their developer and contractor. Such difficulties can negatively affect initial cohesiveness or even prevent the actual project from materializing.

Therefore, this section will start dealing with the third research question of this chapter:

*What are the barriers and enablers for the development process of cohousing?*

It will analyse the barriers to cohousing development arising as a result of the participatory process; and discuss their effects on the cohesiveness and outcome of the future communities.

The second part of the third research question of this chapter (enablers for the development of cohousing) will be tackled in the next section.

The data analysis reveals three main considerations related to the participatory process that can negatively affect the cohesiveness/outcome of the future community: high time and energy requirements from the part of future residents; financial considerations; and struggles with the local authorities.

7.3.1. Time and energy requirements

The high time and energy commitments from the part of the future residents represent one of the drawbacks of the participatory process. The duration of the participatory process ranges (in 9 of the 16 studied communities for which such data is available) between two and seven years; averaging at around four years. This figure for the duration of the development phase has been widely mentioned in the relevant literature as well. This represents quite a lengthy time before actually moving in; and requires important commitments from the part of the future residents. They have to reach common solutions regarding the important aspects of the future community; and realise the physical development as well.
As one interviewee summarizes: “I am also very happy that I wasn't here for the participatory development process, because I know it can be very difficult” (Interview with S.B., 2014). The participatory phase represents a time-consuming responsibility from the part of future residents, as one Swedish interviewee recounts: “it is a time commitment, that is right [...] we had an investigation that took years in which we tried to decide how to best govern this place, who makes what decisions and so on” (Interview with K.D., 2014).

Her affirmation is completed by another resident from the same community, who concludes that in case of the participatory process “you pay with your own time” (Interview with A.D., 2014). A similar view is expressed by one Dutch interviewee as well, who remarks that

“if you want to have a house, and it is not possible for you to wait five years [the duration of the development process in their case], then it is not doable for you; it is a long period of time” (Interview with C.R., 2014).
In addition to being demanding time-wise, the participatory process requires a serious involvement from future residents, an energy-consuming commitment (see first section of this chapter as well):

“we had a lot of processing to do- what should the board decide, what should be decided at house meetings and so on; in the beginning especially, it was not very clear who was deciding what” (Interview with C.R., 2014).

One UK interviewee, founder of a recently-emerged community, emphasizes the commitment required for starting a cohousing project, mentioning that he “sacrificed eight years of [his] life to make this happen” (Interview with M.C., 2014). According to him, in order to realise a cohousing project, “you have to have the energy to be creative and think you want to do this, then to decide how to do it requires energy, and then to actually do it requires energy” (Interview with M.C., 2014). Another UK interviewee (from a different community) shares a similar experience, recalling the efforts and implication required from the future residents of his community in order to materialize the project:

“sometimes things go wrong, and we have to put them right and so on; [...] I think the people who went through the whole thing got through a lot together, and they really feel ownership of this place because of that” (Interview with N.S., 2014).

All these statements support the overarching view of the literature regarding the serious commitments required from future cohousing residents during the participatory process. The following two sections tackle two more topics adding to the challenges of the process.
7.3.2. Financial considerations

a) Lack of sufficient financial capital

In the case of the resident-led model, future residents need to raise their own capital and bear the risks of the physical development themselves. As one Danish interviewee and founder of a researched community remarks, this represents an issue particularly for younger people, who are usually limited in terms of their initial capital compared to more-established seniors:

“especially because everybody was younger, and had perhaps small children, and maybe they didn't have a stable job yet; and I think that normally this is a really big problem, because people are in a phase of their lives where they don't have the opportunity to pay so much [...]. Maybe when they are 50 or 60 years old, they want to make a senior place for themselves and then they have different needs and supposedly more money. [If] the people in the 'establishing phase' are planning these places, [...] some of the problems arise because of the lack of money” (Interview with L.L., 2014).

This perspective is confirmed by a Dutch interviewee, resident of a senior cohousing community, who mentions that compared to younger people, “the good thing for the elderly people is that mostly they have a house that they can sell” (Interview with H.K., 2014). An UK interviewee expands this point of view, highlighting the difficulties for developing cohousing in the case of younger people:

“being realistic, those people who set up cohousing need to have money, and then they have to find the development money as well; [...] so people would sell up their houses and use the money they’ve got to buy and move into something. If you are just buying the land and doing the development, you can’t be sleeping on the streets. [...] If you are young, not only you have not got the money, you cannot afford the seven years [which he personally considers necessary for development]. It’s like- ‘I got children, I can’t take such risks’; and it is not the time of life to be able to do that” (Interview with A.T., 2014).
He goes on to give his solution to this problem, basically describing a partnership model to cohousing development that includes a social dimension:

“in other countries it may well be that there is a social housing network that actually supports people, younger people in a different way; and they don’t need to have the money, there is more social housing and the structures for social housing are not based on ownership [...]. So there are models which are there, they don’t all have to be owned; and if they are owned, they don’t have to be that costly. So there are options there, but they are not common” (Interview with A.T., 2014).

Through these statements, the interviewee has mentioned the main drawbacks of the resident-led model of cohousing development, the lack of financial capital and the risks associated with such a long development process (see: Williams, 2005; Williams, 2008). It must be mentioned that the lack of financial capital in developing cohousing was not specific only to younger people. It was also valid in the case of two of the three studied senior communities, as well as throughout other researched intergenerational communities. Discussions with cohousing residents and professionals (during the preliminary phase of this study) also confirmed that lack of financial capital represents a key reason for the failure of cohousing groups during the development stages. This is where the partnership with a developer comes into play, as it was the case for the development of half of the researched communities (8 ex 16). The partnership model will be discussed in-depth in the next section of this chapter.

b) Risky financial commitments
Risky financial commitments can also represent a shortcoming that appears during the cohousing development phase. At the point of physical development, strong financial involvement of all future residents is required. This is a critical aspect in case of: fixed loans from banks for the whole development; or of minimum densities required by governmental agencies or other developers. The high turnover occurring in some of the communities once significant investments are needed from each future member (see previous section) means
that at least in the case of the resident-led development model, cohousing is considered quite a risky endeavour.

In one example from Denmark, the bank “granted a loan for the development of the whole project” (Interview with T.G., 2014); leaving the responsibility for further dividing the costs to the cohousing association formed by the group of future residents. After lengthy discussions the cohousing association decided on the exact number of buildings and facilities to be built on the site. They strived for a higher density and consequently a lower average price per square meter, in order to reduce the required budget for each family (Interview with T.G., 2014). The risk was that during the construction stage,

“if one or two or three families would fail or go personally bankrupt during that time; it was like a musketeer's oath, all of us would have had to put money from ourselves to cover for them” (Interview with T.G., 2014).

A high turnover among families taking part in the participatory process, not an uncommon occurrence in cohousing, happened at that stage, as another interviewee from the same community recalls. She mentions moving up (due to the turnover) in the list of future residents by 16 places in a time span of just a couple of months; as at that stage a “lot of people left because they couldn't borrow the money or decided it is not for them, whatever the reasons” (Interview with M.G., 2014). Furthermore, according to another interviewee from the same community, some people from the group of future residents “played on more horses, showing interest for other cohousing communities as well” (Interview with T.G., 2014). Some of them dropped out when serious financial commitments were required. Even though in the end they managed to attract enough people on board so as not to jeopardize the physical construction of the community (through higher financial strains on the remaining members); this example showcases some of the risks that can appear when developing cohousing projects.

A similar situation in terms of financial risks comes from a senior Dutch community. In their case, “we had 24 apartments in the plans from the beginning, we were obliged to do so by the municipality; as every block in the area needed to have 24 apartments” (Interview with M.K., 2014). At the commencement of the building phase, they “had about 15 apartments
reserved, and [nine] not yet sold” (Interview with H.K., 2014). This represented a big risk at that stage: “so we took the risk, just doing it and looking where we would end; if it would not have been possible, we would have lost our money” (Interview with A.K., 2014).

With the help of a financial supporter who gave them a loan in order to cover for the entire development costs, they managed to start the construction for the whole development. This was a risky process had they not been able to attract the number of interested people that would buy the remaining flats. Even though they managed to avoid such a situation and sell the remaining flats in the required time-frame; all three interviewees from this community highlight the risks they went through during this final stage of the development phase.

7.3.3. Struggles with local authorities

Either due to prejudices from the part of planning organizations at the time of their development, or due to personal conflicts with the municipality; local authorities have obstructed the development of three studied communities. The former situation occurred during the development of two UK communities; whereas the latter in a Danish case.

This has been done by refusing planning applications or by obstructing the development process. Suggestive in this regard is the direct reference of an English planning officer towards one of the then-developing UK cohousing communities as “the weirdoes who are eating together” (Interview with N.S. 2014). It is important to mention here that planning systems between the four North-West European countries part of this study are different in terms of culture, organization, and devolvement to lower administrative tiers (see: Dühr, Columb, Nadin, 2010). However, they all have in common the fact that local authorities (through their planning organisations) are free to decide on land development within their own jurisdiction, with little interference from higher governmental tiers (with the exception of 'strategic' decisions) (ibid.).

The difficulties (rejection of planning applications for a couple of times) encountered by two of the studied UK communities have been discussed in the previous section. In the case of a studied Danish community, a local conflict led not to the refusal of the planning application,
but to obstructions that ultimately affected the design and layout of the community. An emerging conflict over a plot of land between the cohousing association and the municipality led to complaints on the part of the former about a local development project supported by the latter:

“they [the cohousing association] filed a complaint concerning whether the current project [a development initiated by the local authorities that was then on] lived up to different environmental standards. And it didn't; so the other project of the authorities went down; the environmental state [agency] came in and said-this is not right, you have to stop this project” (Interview with M.G., 2014).

This led to the anger of some people from the local authority, who then proceeded to obstruct the development of the cohousing community. They tried to prevent the development of what they considered ‘a little Christiania’ within their jurisdiction (Interview with T.G., 2014):

“one harassment that we experienced during the actual building process was that there were planning restrictions here [...] for historic reasons, because a secondary road leading to the main road was planned [...]. I am a supporter of planning, and they had a vision that along the big roads in this neighbourhood there should be brick buildings [...] Then that road was cancelled, but the planning restrictions remained on the land; we filed to get that restriction lifted and the architects and some people in the municipality said that they recommend it; but the politicians said 'no' “ (Interview with T.G., 2014).

This refusal to have the planning restrictions of the site lifted forced them to build half of the buildings within the community with brick facades. This significantly increased the overall costs (with about 272,000 British pounds) because of the modifications from the originally-planned wooden facades (Interview with T.G., 2014). Furthermore, it led to unpleasant aesthetical effects and lack of architectural uniformity throughout the community:

“they were made as wooden houses, and without the white boards around the windows, it looks like dead facades” (Interview with M.G., 2014); which leads to "just close my
Support or hostility towards cohousing is dependent on a number of factors, such as: history and tradition with developing such communities; planning framework; and political orientation of the local authorities (see next section). Nonetheless, the possibility that local authorities obstruct the development of cohousing, due to preconceived ideas or other types of conflicts, only adds additional difficulty to an already challenging process.

Summary of the section: This section dealt with the barriers to the development of cohousing. It revealed three key causes for such barriers: high time and energy requirements of the participatory process; lack of sufficient financial capital and financial risks; and struggles with local authorities due to preconceived ideas. Such difficulties can lead to 'development fatigue' among future residents and consequently to a high turnover during the development years before moving in. On top of that, the final outcome might be in jeopardy if finances are ultimately insufficient. Therefore, forming a partnership with an external developer that supports the future residents during this delicate phase can represent a solution for alleviating such difficulties. Receiving support from local authorities represents another enabler for the development process. Both will be discussed in the next section of this chapter.
7.4. Enablers for the development of cohousing

The previous section has dealt with the barriers for the development of cohousing. This section will continue dealing with the third research question of this chapter:

What are the barriers and enablers for the development process of cohousing?

It will focus on the enablers for the development of cohousing—the second part of the above research question. The data analysis reveals two different types of support: if an external developer is co-opted as a development partner; or if local authorities are favourable to cohousing. In addition to the discussion on the implications of such support for cohousing, it is important to mention what interviewees consider as the potential benefits for developers and local authorities supporting cohousing.

![Diagram]

Figure 15: Facilitating the participatory process as a mean for increasing the cohesiveness of cohousing. Benefits for local authorities/developers are solely the point of view of interviewees, all living in cohousing communities. Source: Author, 2015.
a) Facilitating the development process through a partnership with an external developer

As briefly discussed in the previous section of this chapter, the partnership with a developer is usually a solution for cohousing groups that lack sufficient funds for the physical development of the community. Technical considerations, such as difficulties with planning applications, could also be a factor for such a partnership. If this happens, the financial commitments, as well as the time and energy requirements for the cohousing group can be greatly reduced. This happens because an external developer (usually a housing association), with the financial, planning and technical expertise regarding housing, becomes responsible for the technical aspects of cohousing development: finding a suitable site, obtaining planning permission, partial or total financial responsibility, and physical construction.

Half of the studied communities were developed through such an arrangement between the future group of cohousing residents and a housing association. In four of the cases, the developer took full financial responsibility of the development, becoming the landlord of the cohousing association formed by the residents; whereas in three other cases, financial commitments were shared between the developer and the future residents.

In the former case, residents were renting their properties from the housing association. In the latter a mixed tenure scheme was employed; with some properties owned by the future residents, and some available for rent from the housing association. These differences stem from:

- the intentions (such as providing some affordable housing) and financial possibilities of the initial group of future residents who contacted the housing association for the partnership;
- the availability of the developer for supporting certain schemes.

Two interviewees have mentioned the advantages of renting compared to outright ownership. From their point of view renting a building for the purpose of cohousing would make sense, even if the respective group would have the financial means to build/own their houses. Nonetheless, such an assumption is not further supported by the available data; which
indicates that financial and technical reasons remain the key motivation for a partnership between a cohousing group and a developer.

The remainder of the section will deal with the advantages derived by the cohousing group through this partnership; benefits which can greatly affect the outcome and initial cohesion in the future community. Furthermore, this section will tackle one important aspect affecting the long-term success of cohousing communities who rent their properties from a housing association: the importance of developing a long-term collaboration with the landlord. Prior to discussing these issues however, it is important to tackle what interviewees consider as potential advantages for developers partnering cohousing groups.

The benefits of supporting cohousing for developers, from the point of view of interviewees

Given the intensive input expected from future residents during the development stages, support from developers (and local authorities) can represent an important impetus for going forward. Interviewees have mentioned potential long-term benefits for developers; and highlighting such benefits represents a way for cohousing groups to receive their support. It is important to mention that the findings discussed in this section are stemming solely from the interviewees of the current study, all residents of cohousing. Therefore, additional research with developers is needed to confirm these findings from their point of view. Interviewees mention two potential benefits for developers supporting cohousing: political considerations; and including specific conditions in the project in accordance with their policy agenda.

Political considerations: Eight interviewees consider that political considerations can represent an important determinant in supporting cohousing. They consider this point as being particularly valid for housing associations belonging to municipalities (partnering over half of the researched communities developed through the partnership model), bound to the policy directions set by the local authorities. Developing long-term relations with cohousing
groups represents for them not only good advertisement, but also a possibility to fulfil some of their obligations set by politicians.

Exemplary in this regard is the situation of a municipal housing association from Stockholm, who developed around five cohousing communities in the past. That is because it is supposed to also cater for people interested in living communally, either by: partnering with cohousing groups for new developments; or by converting some of the properties in their patrimony to suit communal living needs. This initiative dates from over three decades ago, as one “of the mayors of Stockholm was interested in such ideas” (Interview with K.F., 2014). Therefore,

“he arranged architectural competitions, he told all the municipal housing companies that they should build cohousing projects, there were plots of land available specifically for this purpose” (Interview with K.F., 2014). As a result, “between 12 and 15 cohousing communities were built in that period between 1980 and 1993, [...] so it is extremely important to engage the interest of politicians; but you also need the ones working at the town planning department to give permission, furthermore, they must understand ideas behind developing cohousing” (Interview with K.F., 2014).

Support for cohousing in Stockholm fluctuated after that due to changes in the local government – “we have had a right wing government for eight years and they were totally uninterested, but now that has changed, so probably Stockholm will also be more positive towards cohousing” (Interview with K.F., 2014); further showcasing the importance of political stances for offering support to cohousing groups.

Including specific conditions in the project in accordance with their policy agenda: According to interviewees, developers can include specific conditions for offering their support to cohousing groups; conditions that fit their policy agenda. The most eloquent situation is the condition for the project to have a social character (include affordable housing), as witnessed in three of the studied communities.

In two Dutch communities, municipally-owned housing associations offered significant support; either in form of free land for development, or by giving the cohousing group the
possibility to use parts of a former office building. One Dutch interviewee remembers the conditions set by the municipal housing association during the development phase:

“people with higher incomes, they were not allowed to live here” (Interview with J.R., 2014). Prospective members had to “conform to the rules of the local authority, so it is related to incomes, if you live locally and have a job up here, if you are over 65 and so on” (Interview with C.R., 2014).

Such strict conditions were imposed as a result of the development policy for the respective area, as one interviewee recalls:

“before us, there was nothing here, there were football fields. It was a condition set by the local authorities to the building developers, that in this area they were allowed to develop only project with social character. For example buildings for old people who suffer from dementia, 25 years ago that was a new idea. I think most projects today are based on that idea; but then, such ideas were new. Another project was for living and working [from home], another project was built on Christian beliefs, on the other side they have green roofs- that was a special project as well. Another project was based on the ideas of Rudolf Steiner. So every project here, in this area, has something special” (Interview with C.R., 2014).

By adding a social dimension to cohousing projects in return for their support, housing associations managed to fulfil some of the objectives set by policy documents: on one hand, cohousing communities could be considered social housing developments, thus helping them fill their required quota; and on the other hand, they fitted with the ‘unorthodox’ planning directions that characterised some Dutch provinces in the past decades. As one Dutch interviewee remarks,

“60 years ago it was all sea here, [...] this whole province is only 56 years old, it is land gained from the sea; so they said: it is a new province, new villages, so let them develop the ideas that they think they should try” (Interview with V.H., 2014).
A similar situation has been noticed in the case of one researched UK community, where residents required the financial support of a housing association for the funding of the whole development. This means that residents are co-owners, together with the housing association, of the property. Given that the respective association is a social enterprise (aimed at providing affordable housing), they imposed a social character to the project in accordance with their statute. This collaboration resulted in a mixed-tenure project, with half of the properties owned by the residents, and the other half being rented with social rents from the housing association. It yielded benefits for both the cohousing group, who actually received the financial and political support to physically develop the community; and the housing association, who participated in a development with social character (conform with its statute).

**Benefits derived by cohousing groups from a partnership with an external developer**

The data analysis from this study reveals two main benefits for the group of future residents when partnering up with an external developer: the enabling or facilitation of the physical development of the community; and allowing future residents to focus more on the living systems in the future community.

**Enabling or facilitating the physical development of the community:** An external developer such as a housing association can provide the cohousing group with the economic capital needed to construct the future community. In the researched communities (depending on the financial possibilities of the cohousing group and the availability of their partner), the financial contribution of the external developer was either:

- total, in which case the developer becomes the landlord of the cohousing group;
- or partial, leading at least initially to mixed ownership schemes; with some properties for rent and some others owned by the residents.

In both situations, the financial contribution of the developer was needed in order to realise the actual physical development. Without that extra capital the cohousing group would have either been financially unable to materialize their dream; or would have had to make serious
compromises (having to choose an undesired location due to land price; reducing the amount of shared facilities and the quality of buildings, design compromises etc.). As one founder of a Danish community illustrates, the fact that future residents had to provide the capital themselves, without the support of an external developer, led to design compromises:

“now the people would have the possibility to pay that amount of money, but at the beginning when we had to pay for everything it was a problem [...]. The downside [of the layout of their community] is that it seems very closed to the surrounding [too close together]; it would have been nice if we would have had more openings, but that was also an economic decision. Because we would have to pay ourselves the square metres for each opening, and it was the same price as for a house. That was because of some legal stuff, it was in the contract; we paid for each square metre, so these openings would have been like one small apartment each” (Interview with L.L., 2014).

Financial difficulties are similarly emphasized by a senior Dutch interviewee as well, mentioning that they “had no money, besides the ones of the different owners [future residents]” (Interview with H.K., 2014). This led to considerable risks for the group, and the need to contract a financial supporter to secure a loan for the building phase. Similar remarks come from an UK interviewee as well, who mentions the importance of a partnership with an external developer in view of potential financial difficulties during the development process:

“the key issue around that is financing; because setting up cohousing is expensive, and you need the capital in order to be able to do that. Even though some projects have links with housing associations, like we do here, and the housing association have a say in how the buildings are used etc.; often, projects starting with their second year, they enter financial difficulties[...]. And they approach the housing associations to help them buy the land for the project” (Interview with C.T., 2014).

This support was particularly evident in the case of all four researched Swedish communities, all of them developed by municipal housing associations (three of them through the partnership development model, one through a speculative approach) due to the favourable
circumstances towards cohousing development. According to one knowledgeable interviewee, the partnership model of development

“is the way it works today in fact, in Sweden; [...] you have to convince the owner of the building that they should either build an own [entire] building for them [the cohousing group], or a separate part of the building” (Interview with O.U., 2014).

This view is shared by another Swedish interviewee (from a different community) as well, who states that “the context in the society is very important; because otherwise it is obvious that you need to have a lot of money to back up developing a cohousing community” (Interview with A.D., 2014). He supports his opinion by highlighting the financial commitments required to develop cohousing; and the advantages derived from a partnership in this regard:

“I think it is different depending on what society you live in; but in Sweden, if the municipality is building the flats, I think it is easier to form a pressure group with a big group of people who are interested in these kind of things. And that group, in turn, tries to contact and influence the municipality. Because if you would have to build the house itself, like I understand it happens in other countries, then in my mind it would be more complicated, a harder work and more money, because you would have to finance it yourself. And more work as well, you would have to contact the builder and you would have to finance the building process yourself” (Interview with A.D., 2014).

Allowing future residents to focus more on the living systems in the future community: The partnership model implies that some of the technical aspects of the development phase, such as planning permissions or physical construction (or redevelopment of existing buildings), become the main responsibility of an external developer. Such an approach takes away the need for future residents to be project managers, thus (significantly) easing the development process and allowing them to focus on the living systems after they move in. According to six interviewees, focusing more on the interactions and social aspects during the development
phase represents an important factor affecting at least the initial cohesiveness of the community. As one UK interviewee and founder of a community summarizes,

“there were only six of us who moved here and then had to be part of the development, of what we needed; [...] and we wouldn’t do that again, we wouldn’t be the project leader, the project manager, [...] we wouldn’t do that if we did it again” (Interview with M.T., 2014).

One founder of a Danish community has a similar perspective, remarking that having to deal with all aspects of the development process meant that little time and energy was left for proper community formation:

“you have to go down to the beginning of the development process; we were just families from the beginning. We didn't think about needing to have elderly people, singles, a gay couple; we were just trying to get this project through, it was such a huge task so we didn't have time or energy to think about ourselves as [anything else besides being just] families. But if you would turn the process around and have like a community or somebody who said- ‘we want to do this or facilitate this’, then you should do it; you should make an alternative and think about elderly people and so on. For normal people who are doing it, it is very difficult for them to think about all the different kinds of groups in society and different kind of families and stuff like that” (Interview with L.A., 2014).

The importance of receiving support during the participatory phase, allowing the group of future residents to focus on living systems, is further highlighted by two knowledgeable interviewees. One of them (founder of another UK community) details what the main focus of the development process should be:

“What we did is we focused a lot on the project management [...] whereas I think what is important is to focus on community building. Because we spent so much time on design and financial decisions, we spent much less time on community building” (Interview with M.C., 2014).
Therefore, he is of the opinion that the crux of the participatory process should be about living systems in the future community, and not project management:

“people think that they need to be involved in all the management [during the] participatory process; whereas actually I think they need to be participating, but focusing on community building and how are they going to live together, and how are the system is going to be after the move in. Like deciding on their cooking systems, cleaning systems, how to live together, learning about nonviolent communication and improving all those soft skills” (Interview with M.C., 2014).

This view is shared by a member of a Dutch community as well, as he emphasizes the importance of such focus on community cohesiveness:

“They can skip the thinking about the housing, because it would be already pre-given, already being built [responsibility of the developer]; [...] but you cannot skip the process regarding social interaction. If you skip it, [...] it diminishes the chances of success” (Interview with H.W., 2014).

At this point, it is important to acknowledge a contradiction arising between two apparently opposing statements presented so far in this chapter. Both have been identified as a positive influence on cohesiveness: on one hand, having to overcome adversities during the development phase can lead to the formation of a united, strong group; while on the other hand, receiving external support from developers or authorities can be crucial in making the physical construction possible. Furthermore, the latter allows the group to focus more on community building and living systems, rather than on complete project management.

It must be mentioned that they are not mutually exclusive. While interviewees have remarked that overcoming adversity can ultimately develop a strong group; it does not invalidate the need for external support if financial means are insufficient for the physical construction. The same if opposition (usually from local planning organizations) is strong enough to endanger the physical construction of a community. At the same time, receiving such technical and financial support, while reducing the burden on the group of future residents, does not imply a
complete lack of difficulty of the development process. If nothing else, future residents still have to find consent regarding the living systems in the future community: vision and values, legal structure, community management, communal activities and obligations, design, shared facilities etc. This endeavour still requires their active participation, and can subsequently lead to the formation of a strong group during the development stages. As one Swedish interviewee (part of a community created with the technical and financial support of an external developer) remarks; their three year development process

“was a lot of hard work; and we were really, really tired when it was ready. When we were talking about it, we had about 350 m² of common space already planned and then they said- now it is time to choose your own flat. And it felt quite difficult for us, because we were already so tired after planning the common spaces” (Interview with A.F., 2014).

For the studied communities created through a partnership with a developer (or who received support from local authorities), external support represented the critical boost required for realising the physical development, without which the vision of the cohousing group could not have materialised. However, this does not mean that the development process was ‘easy’, or did not require commitment. The one exception is represented by a Swedish community developed through a ‘top-down’ approach as an initiative of the local authorities, due to the limited input from future residents throughout the development stages.

**The importance of developing a long-term collaboration with the landlord**

As a result of the partnership with a housing association that took full financial responsibility for the physical development, almost one third of the researched communities (5 ex 16) rent their properties from the respective housing association. This happens even after almost three decades of existence. A tense relationship with the landlord in two of these communities, one from the Netherlands and one from Sweden, evolved over time. Such situations prompted interviewees from all the aforementioned five communities to highlight the importance of developing a long-term collaboration with the landlord. This can affect the long-term success
of communities; by decreasing the possibility that board changes, political fluctuations, and shifting priorities of the housing association affect the cohousing communities.

One of the studied Dutch communities has been developed over two and a half decades ago through a partnership with a municipal housing association. That housing association imposed a social character to the project, in return for allowing the community to be established in one of their retrofit buildings. During that period, the “government supported these things, because they were seeing it as a positive thing, fitting with their politics and agenda and so on” (Interview with H.W., 2014). As such, the future group of residents organized themselves as a legal entity in the form of a company with limited guarantee, and formed a partnership with the housing association for establishing their community. Problems started to emerge years later, after the privatisation and merger of the housing association:

“the housing association merged, it was taken over by other people and they know that there is something with this building differently compared to the other ones; but they sometimes forget it and then they just put someone here” (Interview with H.W., 2014).

A lack of interaction and cooperation over the years, coupled with not clearly defined contracts and shifts in priorities for the housing association, led to a situation in which “just breaking down the community and then renting out the flats separately […] would be best for them” (Interview with H.W., 2014). This statement is supported by their aggressive policy regarding vacant flats within the cohousing community:

“the housing association has already threatened us, I am not sure if that is the right term, but they have already said that if we don’t find someone within a month, they will impose someone; and we think that is too fast” (Interview with A.W., 2014).

Such pressure can negatively impact the long-term success of the community. It forces the cohousing group to look for fast solutions once a flat is free; instead of focusing to attract people interested in the setting, that share their vision and values.
Another similarly tense situation has been noticed in the case of a Swedish community, developed over two decades ago through a partnership with a municipal housing association (that owned the building in which the community was ultimately established). Board changes and shifting priorities of the respective association meant that 10 years after moving in, the members of the cohousing community were forced to buy their flats:

“the members didn't want to have to buy their flats; but they were forced into buying their flats if they wanted to stay here” (Interview with K.U., 2014).

This not only ruled out some members who were unable to afford the price; but also led to a situation in which people leaving the group were free to sell to the highest bidder, regardless of their motivation: “it was a rent ownership for 10 years; and the cohousing group could decide who was going to move in here, in case someone was leaving” (Interview with O.U., 2014). The sudden change in tenure type for which the community was not prepared, coupled with the attractive location, has led to a situation in which three of the 25 flats belonging to the community are now owned by people uninterested in the cohousing setting. They have completely opted out of the shared activities. This happened because the cohousing group cannot legally force people who are leaving not to sell to the highest bidder- “if you could just sell your flat to someone who really wants cohousing, then the number of buyers would be lower and the price would be lower, [...] and we can't force them” (Interview with O.U., 2014).

As such, the current situation represents a threat to the cohesiveness of the community, forcing them to use additional measures for attracting people interested in the cohousing setting itself (extensive waiting lists, external members etc.; see motivation chapter for a comprehensive discussion).

The importance of developing a long-term collaboration with the landlord has been a key factor in the relatively smooth existence of a senior Swedish cohousing community developed over two decades through a partnership with a municipal housing association. Residents of this community were keen to avoid the pitfalls befalling the previous two examples.
Interviewees have mentioned how the relationship with their landlord has been ‘nurtured’ by the cohousing group to good effects:

“suddenly, you need money; and then you sell your flat, perhaps to those who pay the most. And it might happen that such people are not necessarily interested in cohousing. We know the example of [the previously mentioned community]; so we have to use our experience, because we knew from the beginning, since we started our talks, you knew that this will happen! So every time there is change of board in the enterprise [of the housing association that is their landlord]; we invite them to lunch or supper and say- ‘you are not supposed to sell us’ ” (Interview with A.F., 2014).

Another interviewee from the same community details how this collaboration has been maintained over the years, mentioning how several times per year

“two or three persons from the housing association come here and they discuss with a little group from our community; [...] so for these meetings with the landlord, this caretaker together with a manager and some people from our community sit down and discuss small and big things concerning the house” (Interview with E.F., 2014).

This constant dialogue over so many years led to mutual respect and understanding between the cohousing group and their landlord; bringing benefits to both involved parties, and hindering the appearance of major conflicts (Interview with A.F., 2014). As one founder of the community remarks, such a positive relation with the landlord has been developed during the development stages, in the three years before moving in;

“and this means that we have built up a communication, a good communication with our landlord. And they can trust us, and we are supposed to trust them! And that is important, because then you can build up on things like that” (Interview with A.F., 2014).
Besides the need for this constant, honest dialogue among cohousing groups and their landlord, two other Swedish communities ensured that they have agreements allowing them to choose their members. This helps avoid the difficulties encountered in the two examples mentioned earlier in this section. In one of these communities, an agreement is in place

“that we can choose new members ourselves. Otherwise, in a building owned by the city there is a queue and people on top of the queue are the first ones to be allowed to move in. [...] We as an association can choose the people moving in our building; so I think that was in the contract between us as a cohousing association, and the municipality” (Interview with A.D., 2014).

In the other one, a different agreement is in place to assure the continuity of the cohousing community; and it has been employed for three decades. According to one interviewee of the respective community,

“sometimes it happens that people who are not really interested in cohousing, they get an apartment so they move in here; but what happens usually is that after about two years, they move out, [...] it happens very naturally” (Interview with R.P., 2014).

A major contributor to this natural transition is their deal with the landlord, “to help the people who are not settling in well in this community to get another apartment” (Interview with T.P., 2014). Such a deal was negotiated before moving in, and is one of the contributing factors to the longevity of this community: “this was when we had this deal with the owner of the house, with our landlord, that they should help these people to find another flat; and they agreed with it” (Interview with D.P., 2014).
b) Facilitating the development process through support from local authorities

The previous section has examined how a partnership with an external developer can facilitate the development of cohousing. This section will look at the support from local authorities, and how it can ease the development of cohousing. The data analysis reveals that for the studied communities, support from local authorities has taken the form of: various premiums on land for development; preferential circumstances for planning application; and financial subsidies. As with the previous discussion regarding a partnership with an external developer, this section will start by looking at the potential benefits that can be derived by local authorities who support the development of cohousing.

The benefits of supporting cohousing for local authorities, from the point of view of interviewees

Interviewees have mentioned two potential benefits for local authorities that support the development of cohousing: political considerations; and socio-economic benefits.

a) Political considerations: Nine interviewees mention that local authorities might be interested in cohousing due to political considerations. Supporting communities such as cohousing represents good advertisement for politicians; while also, in case of more left-wing oriented municipalities, fitting with their political agenda. One Dutch interviewee mentions that the development of intentional communities represents a good advertisement possibility for local authorities. It allows them to showcase to the public their support for minorities or groups with special needs:

“if you talk from a political perspective, local politicians still think it is a good idea to have communities, it is a good advertising for them. And they also sometimes do this; they make new communities for example for mentally handicapped persons or disabled persons, and then they sometimes advertise these things” (Interview with H.W., 2014).
Advertising existing cohousing communities (developed with the support of the local authorities) is a practice that benefits municipalities, according to interviewees from a senior Dutch community: “during the year, we always have many starting groups who come here to inform themselves on how we do this and that” (Interview with A.K., 2014); and “some of them [are] sent by the municipality” (Interview with M.K., 2014). Showcasing existing, ‘successful’ examples represents for local authorities a possibility to gain some political capital through positive advertisement, as one Swedish interviewee remarks:

“and that [municipal] housing association is really supporting us, they are really proud of us, and they bringing guests to show the house, they call us, they ask us and so on. Because we have a lot of experience and a lot of knowledge […], so I think it is a success even for the enterprise [housing association]” (Interview with A.F., 2014).

Local authorities who are more labour or ‘left-wing’ oriented tend to be more supportive towards the development of cohousing. This is because the cohousing setting ‘fits’ better with their political agenda (in comparison to more right-wing oriented political ideologies). According to one Dutch interviewee, support from the part of municipalities

“depends on the area of the country: if you see on the map of Holland where most cohousing projects are located: in the West, […] the big cities [such as] Amsterdam, Rotterdam, the Hague. For example, the North is Groningen, there are three cohousing projects; but in Rotterdam [West], there are 6 or 7. And they have a local government who is red, left-wing, for the labour; they supported cohousing much more than the east of the country, or the north of the country [more centre or right-wing oriented areas]” (Interview with E.H., 2014).

A similar situation, where more left-wing oriented municipalities are more supportive towards cohousing, is mentioned by a Swedish interviewee as well:

“at the moment there are two cities in Sweden that are positive towards cohousing: one is Malmo in the South, and the other is Goteborg. There they have established that the real-estate department has to plan for a cohousing community or ‘Baugemeinschaft’ in
Receiving support from sympathetic local governments has been key for the development of another Swedish senior community as well, as one interviewee remarks: “if you form a pressure group like that in Sweden and contact the politicians; [...] the politicians have ultimately the last word, and if the politicians are hopefully favourable to your idea, then you have much more chances of success” (Interview with A.D., 2014). This situation is possible in the four North-West European countries part of this study due to a decentralised planning system in each of them; meaning that “every municipality does its own planning and they are the ones deciding, so they are sovereign over their development” (Interview with K.F., 2014). Furthermore, interviewees from half of the studied cases mention that there is a predominant centre to left-wing ideology within their communities, explaining to an extent the better fit between cohousing and left-wing local governments: “it does not mean that we have the same political opinions, but there is a tendency of course towards the left, towards the middle and left” (Interview with H.B., 2014).

As one Danish interviewee notices, although “it is not a prerogative, [...] I think that if you want to live together and invest in doing that; then most people would have such [centre-left] views” (Interview with J.J., 2014); an opinion shared by Swedish- “there are some exceptions, but as a group everyone has a view more to the left, something like socialist or labour” (Interview with A.D., 2014); and UK interviewees as well- “I think that basically people would be slightly left-wing and slightly green” (Interview with J.S., 2014).

Social and economic benefits derived from cohousing: Eight interviewees mention that local authorities can derive social and economic advantages from having cohousing communities within their jurisdiction. This is because people living in such communities have a reputation as being good tax-payers, as well as being very active in local community affairs. In some Dutch provinces, supporting intentional communities was seen as advantageous for local
authorities due to their positive influence on local communities. As one interviewee recalls: “in those times they thought it would be good to have [intentional] communities, as that would increase the social cohesion in the neighbourhoods, so that was something they wanted to have; [...] if somebody came with such initiatives, the [municipal] housing association supported it, because it was something like a trend” (Interview with H.W., 2014). He continues illustrating this statement with a common occurrence from his community, having parties, concerts, gaming evenings etc. where people from outside of the community are invited as well:

“we play games together, not only us from the community, but also with people from the outside; so that gives some connections with people from the outside world. [...] It could even be more, but I like that we are contributing in such a way as to create some kind of social cohesion in the [...] town” (Interview with H.W., 2014).

Although in the case of the respective community such support declined over the years (due to a changing political climate and due to frequent changes in the board of their landlord, a municipal housing association); the potential advantages derived from cohousing communities still represent an important determinant for local authorities. This has been noticed especially in the case of Danish communities. According to one interviewee, it should be evident for local authorities that cohousing communities represent a boost for the entire area in which they are located:

“the thing about the local authorities is that it would be stupid for them to say no, because people who want to live like this are people who are very much into local community and stuff. What you should do as a local authority is to try to support it; as it is so obvious that the benefits are very, very big in getting a community like this - they pay taxes, they get involved; imagine that if you develop your own community from the ground, you want to protect it, you want to develop it, more than if you just buy a normal house [...]. And that is something that you cannot expect from other people; so from the local authorities’ point of view, you should look at that” (Interview with L.A., 2014).
Another Danish interviewee (from a different community) makes a similar point, mentioning that attracting people such as the ones living in cohousing communities is usually a target of local authorities:

“we are really good taxpayers! And also good citizens, because we are used to taking responsibilities and get involved also in the local community; in schools or kindergartens when there are boards being established, often people from cohousing volunteer. And I think that is also a reason why the local authorities wanted us here” (Interview with J.J., 2014).

Yet another Danish interviewee shares this point of view, relating how the presence of the cohousing community appealed to the local authorities:

“this is not the best neighbourhood in itself; so there are people who used to live in Copenhagen itself and have moved out and the [local] council was happy to have us, because it changes the place a bit- they want to have people who pay more taxes, compared to people who don't pay so much taxes, as they don't have jobs and stuff” (Interview with N.L., 2014).

The local council is very content with the benefits derived from their community, not only in terms of taxes and positive influence on local affairs, but also regarding sustainability: it has been established that the respective community uses the least amount of water in the whole area (Interview with L.L., 2014). Because of that, the local council is contemplating helping to develop another cohousing community within their jurisdiction: “at some point they talked about making another cohousing project in the city, I don't think it has happened as of yet but they are in the process of talking about it; that is because they see our community as a success, really” (Interview with J.L., 2014).

Interviewees have also mentioned that municipal housing associations are more inclined to support the development of cohousing on unused sites or in unused buildings they are keen to develop. This can assist in the reinvigorating of the area through a new development or redevelopment of previously vacant buildings or sites. Partnering with cohousing groups to
convert such vacant buildings/sites yields economic advantages for the housing association owning the property. In such cases housing associations can either become the landlord of the cohousing group and collect rent (as was the case for four of the researched communities developed through the partnership model); or at least make some sort of profit by selling an unused property. As one Dutch interviewee remarks,

“you find let’s say an office building that is empty for years, and you say: okay, we have a plan; we want to redevelop that building, do you want to [sell] that building for a low cost and redevelop it as a cohousing project? And they agree, most of the time; because it is much better for the community than an empty office” (Interview with E.H., 2014).

This statement is further supported by the four studied communities (one quarter of the total) that are redevelopments of existing buildings (‘retrofit cohousing’- add in lit review); two of them being actual conversions of old dwellings with different functions (a 17th century farmhouse and an unused office building). Furthermore, another Dutch interviewee (from a different community) mentions that the possibility of developing unused sites represents a temptation for local authorities, who could be willing to make concessions in order to see an area or building revitalized:

“mostly, the municipalities don’t have many private entrepreneurs, like we were, that is not usual. And they try to enhance that; for the municipalities have a lot of ground that is not developed, and they want to develop it. So they are eager now to stimulate that” (Interview with H.K., 2014).

**Benefits derived by the cohousing group in case of support for development from local authorities**

Interviewees have mentioned potential long-term benefits for local authorities supporting cohousing; and highlighting such benefits could represent a way for cohousing groups to receive their support. As discussed in the previous section; it is important to mention that the
findings discussed in this section are stemming solely from the interviewees of the current study, all residents of cohousing.

Support from local authorities is particularly important in the case of the resident-led model of cohousing development. In this situation, the cohousing group has to bear the difficulties of the development process by itself, without help from an external developer. Interviewees have remarked that the authorities’ support represented a boost for them at that stage, as the cohousing group had to deal with the project management themselves. Usually, they had to contract themselves architects, lawyers, financial and planning advisors etc.; in addition to finding and acquiring a suitable site for constructing the community, and having to deal with financial aspects as well. Furthermore, besides such tasks, a lot of energy has been invested in order to reach some form of consent regarding the core values and the living systems on which the future community will be based. The data analysis reveals that half of the researched communities belonging to the resident-led development category (4 ex 8) received some form of support from the local authorities during the development phase, in the following forms:

- various premiums on land for development, from allowing cohousing communities to be developed on land specifically designated with social purposes (more details at the end of this section), to discounts on land price. According to one Danish interviewee,

  “we got this land so cheap, it was ridiculous; this was just a field and they were really interested in getting this area developed. They have tried it for 20 years and when we came in, we got it [extremely easy]. And when we started building, they [the developer next to them] paid four or five times as much just for the land” (Interview with L.A., 2014).

In the case of a senior Dutch community, the municipality froze the land price for a significant period of time. This occurred from the moment the cohousing group acquired the option to buy, up until they actually had the resources to buy it and start the development:

“we had some delays in our prices for the land from the municipality; [...] they kept the price the same, that was nice of them” (Interview with M.K., 2014). That was because
“there were some years that had to pass; first, we got the option on the land, and that was about two and a half years of space [until they were in the position to actually buy it], and in that time ground prices were getting higher but ours remained the same” (Interview with H.K., 2014);

- preferential circumstances for the planning application, as local authorities were aware and sympathetic of the efforts required to develop a cohousing project. As one Danish interviewee remarks,

“the local authorities also accepted the fact that we were not professional builders; so they were kind of gentle on us regarding a lot of the deadlines for this and that. They understood that we weren't actually that good [in regards to planning procedures]; our architect actually called us 'a dragon with many heads', because every time he met us there were new people [...], but they were very supportive of us and encouraged us to do it. In general, regarding all the basic stuff, they were listening to us and giving us space and time to be able to do it; they were very interested I felt, to get us to move in here. There was one guy in the office who said- Ah, let's wait another week; it wasn't like we were just breaking rules or anything, but they were just giving us more time” (Interview with L.A., 2014).

Preferential circumstances were given in the case of another Danish community, as the local authorities were interested in improving the image of their city:

“this is a special kind of city with a lot of social housing and sometimes there are some problems” (Interview with L.L., 2014). Therefore, they allowed for the land to be sold “with a project [for cohousing already] included, it was kind of all in one; and it is not that normal, but we wanted this project because everything was already laid out” (Interview with L.L., 2014). The big advantage was that they “didn't have to make a plan for the land and ask for permission at the municipality; [...]because] everything was laid out, the legal things from the authorities were already laid out, so you could just start right away” (Interview with L.L., 2014);
- financial subsidies for cohousing groups to help develop their community within their jurisdiction. In one Danish case, the state supported financially the developing groups: “at that time the state supported establishing things like that; so every person moving in the community paid a share, and that, together with the state funding, was sufficient to guarantee for the loan we needed for developing the community” (Interview with J.J., 2014).

In a Swedish case as well, the local authorities through the municipal housing association contracted to help develop the project offered financial premiums in order to help the cohousing group:

“we ourselves are cleaning the house; [...] and the landlord pays us for it; [...] with that money we buy computers and things like that. It is good business and the house is well cleaned, plus it is very easy for the landlord. [...] And also if we use less water or electricity, we get money back from the landlord; we pay a fixed amount, and if we use less then we get some money back. And we have built up this good relationship with the landlord before the house was built, in those three years while we were planning our community” (Interview with A.F., 2014).

It must be mentioned that with the exception of the above two cases, direct financial subsidies from local authorities towards cohousing groups are a rare occurrence. Such subsidies were available about three decades ago when the two respective communities were developed; however the data does not show whether authorities would still be open for such support today. Granting more favourable conditions for the development of cohousing (such as lower land price and/or preferential circumstances regarding the planning application) seems a more feasible option in the current economic context. Future research is needed in order to test this supposition and the openness of authorities towards supporting cohousing.
7.5. Conclusions of the chapter

The aim of this chapter has been to assess how the development phase of cohousing affects the long-term success of North-West European communities. The findings from this study confirm (through an in-depth, cross-sectional analysis) the overarching views of the cohousing literature regarding the development process. Studies consider this process as challenging, yet important for the formation of a united group (see fourth chapter of this Thesis).

Expanding the knowledgebase, the findings also reveal advantages and shortcomings of the different models for cohousing development (adopted from Williams’ classification); highlighting: the negative effects of the ‘top-down’ approach on the formation of a united group; and the implications of a partnership approach. In terms of the benefits of the partnership approach, external support was critical when the financial means of the cohousing group were insufficient for the physical construction of the community. Furthermore, the technical and legal expertise of external developers allows the cohousing group to focus on community-building aspects, rather than just project management.

Besides the important advantages that a partnership between the cohousing group and an external developer can bring, interviewees have raised concerns about the conditions that could be imposed by the developer in return for their support during the development phase. They emphasize the need for a long-term collaboration; especially if the external developer becomes the landlord of the cohousing community as a consequence of the partnership.

The analysis also points out some potential benefits for developers/authorities supporting cohousing, from the point of view of interviewees (cohousing residents). Such benefits could further encourage developers/authorities to support cohousing. However, Chiodelli and Baglione’s recommend caution vis-à-vis of the view that cohousing automatically implies positive externalities for the surrounding areas (Chiodelli, Baglione, 2014). They mention two key reasons for their argument: the high homogeneity of the communities developed so far, which can exclude low-income or ethnic groups; and the potential for a lack of integration in the surrounding areas, due to its essential ‘inward-looking’ character.
Even though interviewees have mentioned some practices used in their community for combating these two considerations (e.g. reserving a number of properties for social purposes; and allowing the common house to be sometimes used for local community purposes), it must be considered that the perspectives of cohousing residents and of developers/authorities in this regard might differ. As such, in accordance with the recommendations of Chiodelli and Baglione (2014), this study also advises for further research to be undertaken on this particular topic.
8) How the physical design affects the long-term success of North-West European cohousing

Graphic representation of the constituent elements of a cohesive NWE cohousing project (the 'triangle model'). Source: Author, 2015.

According to the interviewees and the literature, one of the main talking points of the participatory process underpinning the development phase of cohousing is the physical design of the community. The literature is in agreement regarding the important effects of the physical layout on the long-term success of cohousing, due to:

- its capacity to influence the amount of interactions within a community;
- the possibility to allow for personal privacy when required.

Such effects support the main scope of cohousing: experiencing an enhanced social environment; while also maintaining personal privacy. Nonetheless, there is a lack of primary research: that investigates the physical design of both ‘single-’ and ‘multi-dwelling’ cohousing communities; and that uses a cross-sectional approach for studying the physical design of European cohousing. In order to help address this gap, one research question has been devised:

*Does the physical design impact the long-term success of cohousing?*
The chapter will be divided into four main sections. The first one will discuss some considerations regarding the generic layouts and size of cohousing. The second one will present the spatial analysis of this Thesis through a number of drawings. The third one will discuss the findings from this visual analysis, and from the accounts of interviewees. It will focus on three key aspects of the physical design that affect the cohesiveness of cohousing: measures aimed at fostering interactions; measures aimed at enhancing privacy; and enhancing the sense of community through architecture. The last section will present the conclusions of this chapter.
Figure 16: Design measures impacting the long-term success of cohousing. Source: Author, 2015.
8.1 Broad considerations regarding the physical design of cohousing

a) The generic layouts used in cohousing

The literature mentions four generic layouts used when purposefully developing cohousing communities (McCammant, Durrett, 1994; Meltzer, 2005). The choice between these layouts depends on: the shape of site; various technical and financial restrictions; and the wishes and needs of the cohousing group (McCammant, Durrett, 1994). Akin to Alexander’s pattern language theory (1977; 1979), as part of these layouts a number of recurring design measures are combined with the scope of cohousing in mind: to foster interaction between residents (via pedestrian pathways; location and accessibility of the common spaces etc.); while also allowing for privacy (via private properties and buffer zones). The next sections will discuss the effects of these design characteristics on the long-term success of cohousing. Prior to that, one important considerations needs to be made: that the four generic layouts for cohousing (mentioned by the literature) are not inherently superior to one another.

![Generic cohousing layouts](image)

**Figure 17:** Generic cohousing layouts. a- ‘pedestrian street’; b- ‘courtyard’; c- ‘hybrid’ between the first two; d- ‘covered pedestrian street’/’atrium’. **Source:** Meltzer, 2005, p.5; base on McCamant, Durrett, 1994.

This can be implied from:

- the variety of generic layouts used by the studied ‘multi-building’ communities (see table 7);
- and the accounts of nine interviewees who mention advantages and shortcomings for each of the two generic layouts most frequent among the studied communities.
<table>
<thead>
<tr>
<th>Layout</th>
<th>Studied communities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pedestrian</strong></td>
<td>Springhill CH; Lancaster CH (partially covered)</td>
</tr>
<tr>
<td><strong>Courtyard</strong></td>
<td>BF Absalons’ Have; BF Kaephoj, BF Lange Eng; CW Hestia; Threshold CH</td>
</tr>
<tr>
<td><strong>Hybrid</strong></td>
<td>BF Bakken</td>
</tr>
<tr>
<td><strong>No purposeful design</strong></td>
<td>BF Graesmarken</td>
</tr>
</tbody>
</table>

Table 7: Dividing the studied ‘multi-dwelling’ communities based on the type of their layout.  
Legend, based on the shortcut of the term ‘cohousing’ in the respective language: BF- Denmark; KH- Sweden; CW- Netherlands; CH- UK.  
Source: Author, 2016.

According to a Danish interviewee, in their respective case a ‘courtyard’ layout made the most sense:

“you could also do terraced houses, a lot of communities have terraced houses; [...] but normally you would get a little garden, this tiny space for every house. And instead of this tiny space, if you pool it altogether, you actually have a garden that you can use. [...] So that was the main reason why they made it that way, it was the best way of actually getting the most out of the land, to put it all [the common green] in the middle” (Interview with N.L., 2014).

Another interviewee, founder of the respective community, adds that the initial “assignment we gave to the architect was that we wanted to have a lots of space for outdoor activities and places to meet” (Interview with L.L., 2014). Consequently, the shape of the site meant that a layout similar to their surrounding areas, comprised of “just terraced houses [cutting] up the building site, [...] with] no room for anything besides walking paths”, made little sense (ibid.).

Nonetheless, there are some disadvantages to their chosen ‘courtyard’ layout, as the same interviewee confesses: “the downside is that it seems very closed to the surrounding” (ibid.),
a bit reminiscent of gated communities. According to one UK interviewee, living in a community using the same generic layout, “it fosters a feeling of the safeness, safety, because it is very enclosed” (Interview with B.T., 2014); however “you can experience that as a negative as well, because you can feel a bit of claustrophobic sometimes” (ibid.).

Other interviewees from the same community summarize the advantages and shortcomings of the layout, remarking that “having something like a central green sort of forces interaction” (Interview with A.T., 2014). This happens because all houses are oriented inwards, towards that central green area (Interview with C.T., 2014). However, this comes with the risk of interference with personal privacy.

Similarly, in the case of communities using the ‘pedestrian street’ generic layout, there are advantages and shortcomings: there is more space allowing for private backyards, thus increasing the potential for personal privacy; however social interaction can be diminished compared to the ‘courtyard’ layout, due its shape. As one Danish interviewee remarks,

“here, because it is like an elongated shape, then we in the South end don't actually see the people in the North end; which is kind of strange, but it is very clear that you see the people whom you live closer with more often” (Interview with S.B., 2014).

As such, the visual analysis starts from the premise that generic cohousing layouts are not inherently superior to one another. A choice between them is dependent on the characteristics of the site and of the community to be developed.
b) The size of cohousing communities

Prior to the spatial analysis, and in addition to the considerations on the generic layouts, a discussion regarding the size of cohousing communities is in place. In one of their most recent works, McCammant and Durrett highlight the importance of size when developing cohousing:

“we have found that American cohousing communities tend to give inadequate consideration to the size of the development [...]. The size and composition of households must be closely considered with regard for common facilities, division of responsibilities, desired activities, and the social environment” (McCammant, Durrett, 2011, p.41).

However, the literature does not come to a common conclusion regarding an exact ideal size (either in terms of housing units, or of residents) for cohousing. For some the ideal size ranges between 12 and 36 housing units (Bestakova, 2011); while others suggest a range between 15 and 35 as optimal (Lietaert, 2010). McCammant and Durrett, citing Danish experience, believe that

“a cohousing community that contains 20 to 50 adults seems to be an optimum size. In our experience, ‘51 and above’ challenges the capacity for a cohousing community to operate in the spirit in which it was built, and when a community contains fewer than 20 adults, the likelihood that every resident will form solid social connections is challenged. In other words, every adult in a cohousing community should ideally have four or five others that they really connect with. But the community should not be so large that residents become, in effect, strangers” (McCammant, Durrett, 2011, p.42).

Bunker et al. also mention a balance that needs to be achieved in terms of the scale of cohousing communities:

- on one hand they need to be large enough in order to maintain a sense of community during the time periods when some individuals are unwilling or unable to take part in common activities;
- while on the other hand they need to be not too large, as this can hinder the familiarity between residents (Bunker et al., 2011).

Citing Danish experience as well, they come to a somewhat different conclusion from McCammant and Durrett, mentioning an ideal range for cohousing between 10 and 40 residents (ibid.).

In practice, financial and development constraints, planning regulations, location (e.g. urban or rural), needs and desires of the group, all these influence the size of communities. Two decades ago, Sullivan-Catlin wrote that US communities range from “six to forty-two homes (the average is about 23 units) on parcels as small as .33 acres and as large as 150 acres” (Sullivan-Catlin, 1998, p.11). More recently, McCammant and Durrett determined that on average, cohousing communities in the US accommodate “15 to 34 households” (McCammant, Durrett, 2011, p.41). In the Netherlands, this range varies between 30 and 70 households; while in Denmark between 12 and 22 (Choi, 2004). As such, cohousing communities can have anywhere from a dozen residents to a few hundreds.

This variation in terms of size can also be noticed when looking at the communities researched in this study: they have between 12 and 100 adults, averaging at around 40 adults (on average circa 75 people, including children). A few interviewees have highlighted advantages for both smaller and larger communities. On one hand, smaller communities lead to a “more tight-knit group” (Interview with R.P., 2014); with the potential to have closer bonds to everyone else in the community: “if the community is too big, then you ask yourself ‘why do I live here?, as you will not get to know the people as well” (Interview with H.J., 2014).

On the other hand, larger communities could mean “more incentives, more ideas of what we could do” (Interview with C.T., 2014); and higher opportunities for sharing and reciprocity. More so, they would be less vulnerable in case of people not participating:

“here, since it is a very big cohousing community, if one people drops out and doesn't do the cooking quota, it is not a very big catastrophe. We don't stand or fall with one or two people” (Interview with R.P., 2014).
Furthermore, very large cohousing communities (e.g. over 100-150 adults) have the option to create smaller housing clusters within their physical boundaries. This clustering is aimed at bringing closer together people with shared interests or people in similar life situations. Thus, they hope to enhance the sense of community and the development of bonds among neighbours. In addition, the management and organisation of such large communities could be eased by devolving some decision-making functions to these smaller clusters. As one interviewee emphasizes,

“if you have bigger cohousing experiments, then probably you need something like clusters, where people have something in common, like children, or similar age. It doesn’t need to be a physical cluster; [...] but to assure that people have something in common when they create clusters, or some common functions” (Interview with H.W., 2014).

One representative example in this regard is the largest cohousing community in Denmark: Munskogard. It comprises of about 225 residents in total (over 150 adults); and “it has been designed to provide for diversity in housing sizes, ownership types and in support of different age groups” (Munskogard Official Website, 2016). The community is physically divided into five clusters of 20 houses; each cluster having their own communal house. The clusters have different types of housing tenure; and are reserved for people in different life situations: for seniors, for younger people, and for families (McCammant, Durrett, 2009). This clustering is aimed at enhancing familiarity and bonds between neighbours in such a large development (ibid.).

Besides the above considerations, no definitive remarks regarding an ideal size (number of housing units and/or people) for cohousing communities can be made with the available data from this study. A reason for this might be the practical requirements for developing cohousing, which will differ on a case-by-case basis. In addition to this, cohousing communities are supposed to be customized for the specific needs and desires of the group developing them, which could also imply different ‘ideal’ size ranges. For example, smaller size ranges might be best suited for more close-knit, ‘self-development oriented’ cohousing communities, as one UK resident (living in such a community) mentions:
“when it was eight, 10 or 12 people, then that was very natural and easy [now the community has about 20 residents]. If you didn’t fit with all those 12 people, you wouldn’t want to be here” (Interview with A.T., 2014).

At the same time, higher size ranges might be better suited for cohousing communities intended to provide diversity and different housing tenures, such as Munskogard. Therefore, a ‘one size that fits all’ approach might not necessarily be viable in practice, when discussing an ideal size for cohousing. After all, the example of Munskogard showcases solutions for communities deemed too large (for cohousing purposes) by the relevant literature.

As such, further research specifically focused on the ‘ideal’ size of cohousing would be helpful. Such research could confirm or infirm these assumptions.

8.2 Spatial analysis of cohousing

Physical design represents an important discussion point of the participatory development process (see development phase chapter), aimed at: reflecting the desires and needs of the group, in particular; and supporting the overarching scope of cohousing, in general. Therefore, in order to determine how the design caters for this main aim, thus affecting the long-term success of communities, two aspects must be taken into consideration:

- How physical design fosters social interaction among cohousing residents; as “social interaction is seen as one of the key elements in creating a sense of community and neighbouring” (Can, Heath, 2016, p. 46);

- How physical design supports the possibility of personal privacy as well, in order to create the ‘best of both worlds’ environment sought by almost all interviewees of this study.

As a consequence, the visual analysis of this section is focused on these two considerations, in 11 communities (ex 16) for which data was available: all of the nine researched communities containing multiple buildings on a site (‘multi-building’ developments); and
two out of the seven researched communities containing flats in a single building (‘single-building’ developments). For the remaining five ‘single-building’ developments, data for visual analysis was unavailable; and hence they are not part of this analysis. In addition to the visual analysis, the accounts of all 46 interviewees from the 16 studied communities are taken into consideration.

The differences between the two development types (‘multi-dwelling’ and ‘single-building’ communities) are influenced by their location: the land price and availability in cities confines communities to look at multi-storey dwellings (blocks of flats); whereas in small towns or in rural areas larger sites are available. The choice of location depends on the wishes of the core group, on their finances and planning opportunities, and on cultural considerations. One Swedish interviewee remarks about such differences:

“in Sweden we were looking for ideas to live in the cities, not on the countryside; so for us this is a model for cities, and this is why you see cohousing in Sweden often being in multi-storey buildings. And also in Sweden we have this 'wonderful' climate, so we prefer indoor solutions. If you go to Denmark, you find out that they have these common houses, and you walk outdoor to get to most of them; so that is one of the differences between Sweden and Denmark” (Interview with K.F., 2014).

Google Earth software, Bing Maps 3D software, and blueprints of plans have been used for the background images of the drawings; the former two being the most frequent. AutoCAD Map 3D, a GIS software tool, has been used for the visual analysis; and Adobe Photoshop CS5, for compiling the drawings. The discussion of the findings will be part of the next section; and will be based both on the visual analysis and of the accounts of interviewees.

<table>
<thead>
<tr>
<th>Type</th>
<th>Studied communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Multi-Building’</td>
<td>BF Absalon’s Have; BF Bakken; BF Graesmarken; BF Kaephoj; BF Lange Eng; CW Hestia; Lancaster CH; Springhill CH; Threshold CH</td>
</tr>
<tr>
<td>‘Single-Building’</td>
<td>KH Dunderbacken; KH Faerdknappen; CW Het Kwartee; KH Tullstugan; CW Leeuwarden; CW Romolenpolder; KH Tre Portar</td>
</tr>
</tbody>
</table>

Table 8: Dividing the studied communities based on their physical layout. **Legend**, based on the shortcut of the term ‘cohousing’ in the respective language: BF- Denmark; KH- Sweden; CW- Netherlands; CH- UK. **Source**: Author, 2016
BF Absalon’s Have (Roskilde, Denmark)

Top right: Spatial distribution in the community. Source: Auber, 2015; using AutoCAD Map 3D 2014 and Google Earth (background reference).
Middle: ‘Bubble diagram’ analysis of the community, focused on DSI elements. Source: see above.

Figure 18

<table>
<thead>
<tr>
<th>Design elements encouraging social interaction (DSI)</th>
<th>Legend:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Cars at edge of site + Pedestrian pathways</td>
<td>Yes</td>
</tr>
<tr>
<td>2) Common Green</td>
<td>Yes</td>
</tr>
<tr>
<td>3) Further Meeting Areas</td>
<td>Yes</td>
</tr>
<tr>
<td>4) Clustering some functions to encourage SI (Mailboxes, Laundry, Cooking Lists etc.)</td>
<td>No</td>
</tr>
<tr>
<td>5) ‘Day uses’ of individual properties oriented towards common pathways/ facilities</td>
<td>Yes</td>
</tr>
<tr>
<td>6) Private courtyards/ decks not fenced (open)</td>
<td>Yes</td>
</tr>
<tr>
<td>7) Central location of Common house and adjacent space</td>
<td>No</td>
</tr>
<tr>
<td>8) Fostering Community Identity through Architecture</td>
<td>Yes</td>
</tr>
<tr>
<td>9) Buffer zones for individual properties (courtyards/decks)</td>
<td>Yes</td>
</tr>
<tr>
<td>10) Possibility for Private access to individual properties (Alternate Route from parking to individual properties)</td>
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</tr>
</tbody>
</table>

Design elements enhancing personal privacy

Part: Open Meeting Places
Figure 19

Design elements encouraging social interaction (DSI)

<table>
<thead>
<tr>
<th>Design element</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Cars at edge of site + Pedestrian pathways</td>
<td>Yes</td>
</tr>
<tr>
<td>2) Common Green</td>
<td>Yes</td>
</tr>
<tr>
<td>3) Further Meeting Areas</td>
<td>Yes</td>
</tr>
<tr>
<td>4) Clustering some functions to encourage SI (Mailboxes, Laundry, Cooking etc)</td>
<td>Yes</td>
</tr>
<tr>
<td>5) ‘Day uses’ of individual properties oriented towards common pathways/ facilities</td>
<td>Yes</td>
</tr>
<tr>
<td>6) Private courtyards/ decks not fenced (open)</td>
<td>Yes</td>
</tr>
<tr>
<td>7) Central location of Common house and adjacent space</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Legend:
- Individual Households
- Common Green
- Private Courtyards/ Decks
- Site Perimeter
- Parking Lots
- Main Site Entrance
- Pedestrian Pathways
- Open Meeting Places
- Parking Spaces
- Private Access Possibility

Design elements enhancing personal privacy

<table>
<thead>
<tr>
<th>Design element</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>9) Buffer zones for individual properties (courtyards/decks)</td>
<td>Yes</td>
</tr>
<tr>
<td>10) Possibility for Private access to individual properties (Alternate Route from parking to individual properties)</td>
<td>Partial</td>
</tr>
</tbody>
</table>

Source: see above.
**BF Graesmarken (Borup, Denmark)**


*Middle:* ‘Bubble diagram’ analysis of the community, focused on DSI elements. *Source:* see above.

### Design elements encouraging social interaction (DSI)

<table>
<thead>
<tr>
<th></th>
<th>Cars at edge of site + Pedestrian pathways</th>
<th>Day uses of individual properties oriented towards common pathways/ facilities</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Common Green</td>
<td>Private courtyards/ decks not fenced (open)</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>Further Meeting Areas</td>
<td>Central location of Common house and adjacent space</td>
<td>Yes</td>
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<td>4</td>
<td>Clustering some functions to encourage SI</td>
<td>Fostering Community Identity through Architecture</td>
<td>Yes</td>
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</table>

### Design elements enhancing personal privacy

|   | Buffer zones for individual properties (courtyards/decks) | Possibility for Private access to individual properties (Alternate Route from parking to individual properties) | Yes |

**Figure 20**
**Design elements encouraging social interaction (DSI)**

1) Cars at edge of site + Pedestrian pathways  | Yes  | 5) ‘Day uses’ of individual properties oriented towards common pathways/ facilities  | Yes  
2) Common Green  | Yes  | 6) Private courtyards/ decks not fenced (open)  | Yes  
3) Further Meeting Areas  | Yes  | 7) Central location of Common house and adjacent space  | Yes  
4) Clustering some functions to encourage SI (Mailboxes, Laundry, Cooking Lists etc.)  | Yes  | 8) Fostering Community Identity through Architecture  | Yes  

**Design elements enhancing personal privacy**

9) Buffer zones for individual properties (courtyards/decks)  | No  | 10) Possibility for Private access to individual properties (Alternate Route from parking to individual properties)  | No  

**Legend:**
- Individual Households
- Common Green
- Private Courtyards
- Decks
- Site Perimeter
- Parking Lots
- Main Site Entrance
- Pedestrian Pathways
- Open Meeting Places
- Private Access

**Figure 21**
**Figure 22**

**Design elements encouraging social interaction (DSI)**

<table>
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<th>Design element</th>
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<td>1) Cars at edge of site + Pedestrian pathways</td>
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Figure 23

**Design elements encouraging social interaction (DSI)**

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<tr>
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Figure 24

Design elements encouraging social interaction (DSI)

1) Cars at edge of site + Pedestrian pathways  Yes  5) 'Day uses' of individual properties oriented towards common pathways/ facilities  No
2) Common Green  Yes  6) Private courtyards/ decks not fenced (open)  Yes
3) Further Meeting Areas  Yes  7) Central location of Common house and adjacent space  No
4) Clustering some functions to encourage SI (Mailboxes, Laundry, Cooking Lists etc.)  Yes  8) Fostering Community Identity through Architecture  Yes

Design elements enhancing personal privacy

9) Buffer zones for individual properties (courtyards/decks)  Yes  10) Possibility for Private access to individual properties (Alternate Route from parking to individual properties)  Yes
Figure 25

Lancaster Cohousing (Halton, UK)


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</table>
**Top left:** Aerial view of the community. **Source:** Google Earth, 2015; **Top right:** Spatial distribution in the community. **Source:** Author, 2015; using AutoCAD Map 3D 2014 and Google Earth (background reference).

**Middle:** ‘Bubble diagram’ analysis of the community, focused on DSI elements. **Source:** see above.

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**Figure 26**

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**Legend:**

- Individual Households
- Common Green
- Private Courtyards
- Decks
- Site Perimeter
- Pedestrian Pathways
- Parking Lot
- Main Site Entrance
- Open Meeting Places
- Private Access Possibility
**Threshold Cohousing (Gillingham, Dorset, UK)**

*Top left:* Isometric representation of the community. *Source:* Good Homes Alliance Website, 2015; *Top right:* Spatial distribution in the community. *Source:* Author, 2015; using AutoCAD Map 3D 2014 and Google Earth (background reference); *Middle:* ‘Bubble diagram’ analysis of the community, focused on DSI elements. *Source:* see above.

### Design elements encouraging social interaction (DSI)

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Figure 28: Ground Floor of Faerdknappen community in Stockholm, Sweden.

Source: (Author’s modified version of) Karnekull, 2010.
8.3 How physical design influences the long-term success of cohousing

The visual analysis and account of interviewees reveal a number of design characteristics that positively influence the long-term success of the studied communities, by: fostering social interaction; enabling personal privacy; or creating a ‘community identity’ through architecture. Each of these will be addressed in this section.

8.3.1 Measures fostering social interaction

In order to foster social interaction, the studied communities have made use of a number of design measures related to: their outdoor spaces; the common house/areas; and the orientation of buildings. They will be discussed throughout this section.

a) Design measures related to outdoor spaces

The data analysis shows that in the case of ‘multiple-building’ communities, corralling the cars at the edge of the site and restricting traffic within the premises of the community represents an important design characteristic. It enhances social interaction because residents have to walk between the parking area and the main entrance of houses; and because of the additional space available for developing communal outdoor areas.

Pedestrianization: A design that prohibits the parking and regular circulation of auto vehicles on site means that residents have to walk from the parking spaces to the main entrance of their homes. Eighteen interviewees consider that this measure greatly enhances spontaneous interactions within their communities. Furthermore, the visual analysis of the researched communities (see figures 18-28) shows that all but one of them apply this design concept, making it a common feature of cohousing. Parking lots are usually situated in front of the main entrances (or in front of one of them, in case of multiple such entrances) to the communities; ‘forcing’ residents to take one of the pedestrian paths specifically designed to connect the parking with the private homes. Such walking routes also connect residents coming from the parking lots with the common house. Depending on the location of the common house relative to the parking lots, in two thirds of the ‘multi-building’ communities part of this study (6 ex 9) the majority of residents have to pass by it in order to reach the main entrance to their homes.
Figure 29: Pedestrianization in cohousing. Source: Author, 2016.
The only exception, where all residents have parking lots in front of their homes, is a Danish community who had a very troubled relation with the local authorities. As a result the planning office of the municipality refused to change the designation of the site in order to better suit cohousing purposes. Thus, the community was forced to abide to development conditions designed for traditional housing (see figure 20):

“it was due to the planning restrictions, basically this site was not meant for this kind of purpose; so if we would have been able to decide ourselves, I am pretty sure we would have had a big parking lot at the edge and then just pathways inside the community” (Interview with T.G., 2014).

Having to walk from cars to the main entrance of their homes via specifically designed pedestrian pathways represents a key measure for enhancing casual social interaction among residents of the studied communities. One Danish interviewee describes the concept:

“we also have something called the 'main street', which goes through the whole cohousing community. So it is like a main pedestrian street, and there are no cars; you don't see the cars from the houses, and that was a conscious decision. Sometimes the cars come in, but only to load or unload stuff” (Interview with S.B., 2014).

Another interviewee from the same community reflects on the implications of this design measure, highlighting how it enhances social interaction:

“no matter which house you are in, you can look at people in other houses, [...] you can see if your neighbours are at home; and you can always see who is in the [pedestrian] street, [...].It is very, very easy to go out there and talk to the people who are on the street” (Interview with H.B., 2014).

He further mentions that this design was purposefully adopted to resemble “a little village, where you can see the street going through the whole community, like in the villages of old” (Interview with H.B., 2014). A similar account is shared by an UK interviewee, mentioning
how the lack of cars on site and the pedestrian pathways encourage interaction in his community: “no cars on site, a pedestrian street, [...] two access points; so for 35 houses, people are constantly passing each other’s windows” (Interview with M.C., 2014). One of the restrictions of the site is the fact that a small cluster of houses is isolated from the common house (due to the existence of an old dwelling also belonging to the community, now converted for commercial purposes); however the lack of cars on-site and the pedestrian path mitigates this disadvantage:

“to walk on site, we all have to walk past their houses, so I cycle past, I walk past; [...] if they are in the garden, then I can see them, and they can see the common house, so it’s better connected than I thought” (Interview with M.C., 2014).

Another UK interviewee (from a different community) has a comparable point of view, mentioning how the pedestrian pathways and layout of the community encourage interaction:

“I mean, the common house is here in the middle, and everybody walks past it. And the street works well; most people live on the [main pedestrian] street. [...] Because there are no cars, you can just walk up and down and talk, there is no noise; in the summer people sit down there by the pod watching their children, and you can stop, talk and chat” (Interview with N.S., 2014).

An UK interviewee (from yet another studied community) supports this statement, noticing that the lack of cars on-site and pedestrian walkways represent “a good model for encouraging sociability” (Interview with B.T., 2014). Her account is shared by one of her neighbours, who summarizes the crux of such a design and how it can contribute to interaction in cohousing:

“by [...] having car parks away from the buildings, [...] you have to walk everywhere: if you want to go to the garden, you have to walk past people; if you’re going to the farmhouse, you walk past people; if you are going out to the car park, you walk past people” (Interview with A.T., 2014).
Additional space for communal outdoor areas: A design that prohibits the parking and regular circulation of auto vehicles on site allows more space for the creation of outdoor meeting areas. These enhance social interaction (as will be detailed throughout this section); and, in the case of green areas, the wellbeing of cohousing residents (Marcus, 2000). Outdoor meeting spaces exist in all studied communities; either in the form of open, green spaces or as ‘leisure areas’ adjacent to the common building (in case of ‘multi-building’ communities). Such spaces can include patios, children’s playgrounds, or in case of non-urban communities (due to land availability), areas for permaculture and for animal husbandry. Open, green spaces are an important catalyst for social interaction in cohousing, as emphasized by 18 interviewees. Besides their accounts, the visual analysis reveals that less than half (4 ex 9) of the studied ‘multi-building’ communities use a ‘courtyard layout’ (see first section of this chapter). In such cases, the built environment is facing a central, open green space that occupies a significant proportion of the whole site (see figures 18-27). Further strengthening this point, in the single example (from the studied communities) where all properties have parking lots in front of their houses; residents bemoan the lack of sufficient outdoor meeting spaces:

“there is a lot of asphalt over here and there is no need for that, really; so it was all due to planning restrictions. I would say that all the way through this project, it has been very pragmatic; and I do see some disadvantages here and there” (Interview with T.G., 2014).

In terms of the role of common green areas as a catalyst for social interaction, one Danish interviewee remarks that “the shared area is a big deal for social interaction here” (Interview with J.L., 2014). This point of view expanded by his partner:

“in the summer and mostly in the afternoon, when we pick up the kids from day-care and come home and it is warm and everybody is outside and you stand around talking and stuff like that; that really encourages interaction with each other” (Interview with N.L., 2014).
Figure 30: More space for shared outdoor areas in cohousing. Source: Author, 2016.

More space for communal areas in cohousing:

The drawings highlight the shared outdoor space in three researched communities. Notice that in all examples, parking lots are corralled at the edge of the site. The shape (first and last drawing from the top) and the density (middle drawing) contribute to the large amount of outdoor shared spaces as well.

Source: Author, 2016; using AutoCAD Map 3D 2014 and Photoshop CS5 software, and Google Earth for the background reference image.

Drawings are not to scale.

Legend:

- Brown: Built Environment
- Green: Shared Outdoor Spaces
- Red: Site Perimeter
- Orange: Parking Lots
She goes on to mention that the lack of cars on-site allowed them to have a central green in their community, a design solution contravening mainstream norms:

“there is a little bit of envy because we have used our outdoor space to make this courtyard, while the others [their neighbours living in standard housing] have used it to make parking spaces. For them, I think it is really, really important to have their car exactly in front of the door; where we kind of compromise” (Interview with N.L., 2014).

Members of a Dutch community agree in unison about the role of the green common space in enhancing social interaction among the residents of their community. One of them mentions that “the garden helps us to meet the neighbours; in summer, it is easier to meet people, because in the garden you meet everyone” (Interview with C.R., 2014). Her neighbour agrees, adding that “most houses have balconies or gardens [small, private front yards for residents living on the ground floor] pointing towards the common garden; if it is nice weather and someone is on the balcony, it is easier to communicate” (Interview with M.R., 2014).

Two UK interviewees share a similar opinion regarding the role of the common green, emphasizing that, weather permitting, it acts as a catalyst for social life in their community (Interview with A.T., 2014):

“there is a centralisation, a circulation in the centre of the site, which is a garden; and in the summer, when it is warm, everybody goes outside and eats and drinks in the garden” (Interview with C.T., 2014).

Nonetheless, it is important to mention that the downside of outdoor areas in their role as social catalysts for cohousing is their dependence on good weather; a factor especially valid in North-West European climatic conditions. This leads to fluctuations in their use depending on the periods of the year, as eight interviewees confess. According to one of them,
“the seasons mean a lot- winter time is coming, people stay more in their houses and we only see each other regularly in the common dwelling; but in the summer time and the springtime, it is much more open, we are more out in the green, all the doors are open, people constantly going in and out which leads to interactions on the street” (Interview with J.G., 2014).

A Swedish interviewee agrees, mentioning that the weather represents a prime factor affecting the role of the common green as a social catalyst:

“in the summer and in the spring and in the late summer, so during the warm period, we meet spontaneously downstairs, outside, drinking coffee or taking something from home and going outside, there is always somebody sitting there. But in the winter time it doesn't happen” (Interview with D.P., 2014).

Therefore, outdoor spaces can be regarded as an important addendum to the common house in its role as the social hub of the community; however it cannot be considered a substitute for it. As one Danish interviewee recounts,

“as we moved in and we didn't have this common house at the beginning, we met in the street; but that was during the summer, of course. Otherwise we didn't really meet. And then we organised to eat in each other's houses and things like that; that was right at the beginning, before the common dwelling was built. But otherwise, this common house is the most obvious factor for interaction” (Interview with M.G., 2014).

b) Measures regarding the common house/common areas
In all studied communities, the common building (or common rooms/floor in case of ‘single-building’ communities) represents the ‘heart’ of the community, the main catalyst for interaction (together with the common green in some communities, during the warm season). This is because it usually clusters the facilities underpinning the main shared activities of the community (e.g. communal meals); and as such plays a key role in
establishing the sense of community sought by the vast majority of interviewees. Of relevance to this discussion about the role of design in enhancing social interaction are two design measures (involving the common house) specifically conceived for this purpose: encouraging people to use the common house by clustering some common household functions in it; and locating it centrally, relative to the site.

Typical household functions centred on the common house/areas: In 10 of the studied communities (ex 16) some common household facilities, like mailboxes or laundry, are clustered in the common building. According to eight interviewees, this measure was a conscious choice aimed at encouraging casual social interaction by increasing the amount of trips between individual properties and the common house. The same principle is valid for ‘single-building’ communities as well; where the common areas are usually located at the ground floor of the block.

Various posts, advertisements or lists for common activities (e.g. with people confirming their participation in communal meals) can be found in the main entrance to the common house/areas. This represents a further motive to increase the amount of such trips and promote casual social interaction. According to one Danish interviewee,

“also on purpose, the people who designed this place made sure that we all have to come to the common house every single day to pick up our post, to wash our clothes and to come and have dinner. So that would be the three main purposes for us coming in the common house every day; and see what is on the menu tomorrow or the day after tomorrow” (Interview with H.B., 2014).

Another Dutch interviewee highlights the effects of clustering mailboxes on social interaction, and recalls where they got the idea from:

“we have the post-boxes all together, so everybody has to go there. It was my mother who inspired me, because she lived in a service apartment and she said: ‘if I want to see someone, I just go down to the post box to get my paper and I meet people’ ” (Interview with M.K., 2014).
Interviewees from one Swedish community agree in unison about the role of clustered mailboxes at the entrance hall, located at the ground floor of the building housing their community (in front of the main entrance). According to one of them, the entrance hall “was meant to be so big, because it was meant to be a meeting place and a place of information where you can read about what is happening in the house and […] get this overview about what is going on” (Interview with K.F., 2014).

Because of that condition,

“you are passing the post and things are happening there, and you can see what is going through notes on the wall, and also you are pointing out there if you want to eat or if you don't want to eat at the common meal” (Interview with A.F., 2014).

As a result it has become a place for casual encounters for residents, a key element fostering interaction within the community:

“even in the morning when you come down to fetch your newspaper or when you come home, you meet people; and it is so important, I think it is difficult for others to understand how important that is” (Interview with A.F., 2014).

In addition to the clustering of mailboxes and role of entrance halls; the existence of common laundries in the common house/areas represents another measure that promotes casual social interaction. Individual properties in the studied communities were designed to be ‘fully functional’ and include all amenities of mainstream housing. This measure stems from the main motivational determinant of ‘getting the best of both worlds’ in cohousing. Nonetheless, residents still use the common laundry in various circumstances, as one Dutch interviewee remarks: “we also have a common laundry here, where you can also meet people; not everybody uses it, but roughly half of the people” (Interview with M.K., 2014). One UK interviewee highlights the implications of using the common laundry in terms of social interaction:
“our washing machine broke down and I haven't replaced it. In some regards it is difficult, because before I would be in my pyjama, put my dirty clothes in the washing machine and it is all over in three minutes. But now I have to be dressed [in order to go to the common laundry] and be prepared to have at least two or three conversations, so it takes me half an hour to put my washing in. And it is quite nice, but it also was a big adjustment for me” (Interview with J.S., 2014).

Visibility of common house/areas: In less than half of the studied ‘multi-building’ communities (4 ex 9), the common house had a somewhat central position relative to the perimeter of the site (see figures 18-27). This design measure can enhance social interaction by allowing the vast majority of residents to have visual contact with the common building from their houses. This allows them to be aware of, and join any spontaneous gatherings that might occur; as seven interviewees remarked.

One Danish interviewee refers to the central location of the common house as a conscious design element fostering interaction, mentioning that “certainly this [common] house makes it a bit easier;[as] it is located in the centre of the community” (Interview with M.G., 2014). One UK interviewee concurs, mentioning how the central location of the common house represents a positive factor encouraging interaction among residents:

“we got all the community facilities clustered by the common house, in the centre, so there is the laundry, the food store, the notice boards that haven’t gone up yet; and then the common house, and the guest bedroom, and the children’s room. [...] From anybody’s house, if you step outside, you can see at least half of the houses from outside your door. And then the common house terrace, a lot of houses if they sit outside can see the terrace from the front” (Interview with M.C., 2014).
Figure 31: Visibility of the common house. Source: Author, 2016.

Visibility of the common house:

The drawings highlight that a good visibility towards the common house is difficult to achieve in the studied communities due to site restrictions and building density considerations. Nonetheless, achieving this, even if only partially, can enhance spontaneous interactions in cohousing.

Source: Author, 2016; using AutoCAD Map 3D 2014 and Photoshop CS5 software, and Google Earth for the background reference image.

Drawings are not to scale.

Legend:

- Good visibility of common house
- Little/No visibility of common house
- Site Perimeter
- Common House
Most residents can observe and ‘chip in’ in case of spontaneous gatherings in and around the common house. However, a small number of properties from the respective community are physically isolated from the common house and have no direct visual contact with it (see figure 25; on the left of the site). This is due to an existing building belonging to the cohousing group that was converted for commercial purposes: “the only weakness that we’ve got, is that we’ve got six houses on the other side of the mill, so they’re a bit more isolated” (Interview with M.C., 2014).

This situation showcases that even though site restrictions might mean that locating the common building relatively central in the community will require various compromises that the cohousing group is unwilling to take; it can represent an additional factor augmenting social interaction in cohousing. Nonetheless, despite this advantage, the visual analysis of the researched ‘multi-building’ communities showcases the difficulty of all houses on the site having a good visibility of the common house and adjacent areas (see figure 31). In theory, pedestrian layouts should struggle in this regard more due to their longitudinal nature (which means that the private houses closer to the common house are at an advantaged compared to houses situated farther). However, even in the case of the ‘courtyard’ layout with the communal house relatively central to the site, requirements for building density and site restrictions means that not all of the buildings will have good direct visibility to the common house.

Extrapolating the point from this section for the case of ‘single-building’ communities (blocks of flats); the physical transparency of the common areas represents a design measure that enhances visibility, thus fostering social interaction. Four interviewees have highlighted this. One of them mentions that

“a very good design for encouraging community life” is to have common areas with "windows [glazed walls] everywhere [...]. So when you come in here you can see what is going on and you can contact people” (Interview with E.F., 2014).
Another Swedish interviewee (from the same community) explains the rationale behind their decision of having common rooms with glazed walls; recounting that “we also thought about the idea of having windows so that you can look into the library, so that you can look if anybody is working with clothes or something [in the common workshops], so you can just wave or something like that” (Interview with A.F., 2014). She goes on to highlight the importance of this measure not only in fostering social interactions among residents, but also in a figurative sense:

“now I think that the most important things for a house like this is to have everything transparent [regarding the common areas]; so you can see if someone is in the room and thus encourage social interaction. And people coming here for example see that I'm sitting here and talking with you, so that is very important. Or if we have a meeting in the house, people can see and ask us ‘what are you doing?’, so everything is transparent. [...] It is important to have transparency, no chatting in private rooms or things like that; I mean, we have privacy, that is not it, but we want to be transparent and that is so important” (Interview with A.F., 2014).

The physical transparency of common areas would be a desired solution for a studied Dutch community as well (Interview with H.W., 2014); however the tense relation with the landlord makes any major physical altering to the existing structure improbable (the entire community is located on the first floor of a converted municipal building). This has forced them to devise an alternative: a red lamp placed in front of the entrance to their common areas, visible from all private flats, which glows when people are present in the common areas. This system is devised to encourage social interaction in absence of possibilities for physically altering the building; and the residents thought of an ingenious possibility to develop it a step further:

“we could possibly add to that [...] an app [that] sends a signal through the smart phones and notifies you if someone is in the common room. You could see this even if you are in your own flat, because as of now you can only see if the red light is burning if you are on the corridor. It could be like a signal; something like when the Queen puts a flag on the palace to show that she is at home. I think that encourages spontaneous
interaction, without planning too much; so that would be something that I would like to have” (Interview with H.W., 2014).

The previous example not only highlights the importance of visibility for fostering casual social interactions in cohousing; but showcases how ingenious solutions can be used to circumvent the limitations of the existing building stock. Further research regarding the refurbishment of existent buildings to suit cohousing purposes is recommended in order to expand on these considerations.

c) Orientation of private buildings

In eight of the nine studied ‘multi-building’ communities, the active functions of the individual properties (usually the kitchen and dining room, in some cases the living room as well) are located on the side facing the pathways of the community. This design measure allows for the possibility of visual contact between people using their kitchen and dining room (or living room), and the ones passing by their houses on pedestrian pathways. In doing so, it enhances a sense of community and encourages interaction; an opinion shared by 11 interviewees.

One Danish interviewee describes how such interaction can occur; even though the layout of the private homes in his community (caused by financial reasons and unreasonable planning restrictions) impedes it:

“one thing that I really do miss in our houses is that the active functions are on the back side, the kitchen should be really facing the street; […] because right now you have two bedrooms facing the street and a bathroom and the utilities room. If it would be otherwise, at the time like five or six in the afternoon, when you’re doing the dishes or preparing the food and standing in the kitchen you can see your neighbours passing by and say: ‘hey, come in, have a beer’; or ask who is playing tonight in the Champions League. So such spontaneous interactions should be more facilitated through the layout of the houses in the community” (Interview with T.G., 2014).
A similar opinion is shared by a Dutch interviewee, also bemoaning the restrictive layout of his community: “it is mainly [...] the fact that our windows are looking towards the street, so I cannot see anybody moving within the community, on the corridor” (Interview with H.W., 2014). Therefore, orienting the active functions towards the community represents a solution in his opinion:

“If you are looking on a house that is seeing on the street, you can see your neighbours walking on the street and it is easier to say: ‘Oh, I have to say him something’; so for spontaneous interaction, it is better if we would be able to see each other, and in this case this is not possible, that is a disadvantage” (Interview with H.W., 2014).

Another Danish interviewee (from a different community) indicates the reasoning for a layout that orients the active functions of their homes towards the community pathway and central Green. She mentions how it can foster interaction:

“I think it was an architect who said that we kind of got like the ‘outside, inside’; the inner space facing the central green is very bright, with bright materials, and further towards the back of the house it is darker, our private spaces with bedrooms and so on. [...] So it kind of opens up to the community, and you can see if there is somebody walking in the common area and if you need to talk to them you can just go out and talk to them” (Interview with N.L., 2014).

One UK interviewee mentions a similar concept applied in his community, where “the kitchen windows are oriented to the pedestrian street, there is a lot of glazing there, onto the street” (Interview with M.C., 2014). In his view, this measure greatly encourages casual interaction among residents of his community: “I think that really helps; so people see in easily, and I can see out easily” (Interview with M.C., 2014).
8.3.2 Measures enhancing privacy

The crux of the cohousing model is the opportunity for its residents to experience a more vibrant social life (compared to their experience of mainstream housing); while at the same time retaining personal privacy, when needed. Finding a balance between these two inherent contradictory choices is no easy feat; and its challenges are replicated in regards to the physical design of the site as well. Some measures aimed at strengthening the community sense, such as having non-enclosed courtyards for individual properties, or using large windows on the facades, can have at the same time negative implications for the personal privacy of residents. The account of one Danish interviewee highlights this tension. The layout of the site, architecture of the houses (large windows facing the central Green and pedestrian path), and building density, mean that in his community,

“for some people it [privacy] is a bit of a problem, they think that they need to plant more plants or bushes around the houses or they feel the need to go to their summer houses in the weekends, in order to balance this [closeness]. And some people also think that there is too much 'view' into the house” (Interview with L.L., 2014).

From a design perspective, the data analysis reveals two measures aimed at enhancing the personal privacy of cohousing residents: the possibility for private access to individual houses outside of the premises of the community; and the existence of buffer zones for individual properties. It must be mentioned that in all studied communities, individuals or families had their own ‘fully functional’ private flats/houses. Besides these design measures, the studied communities also developed certain mechanisms for enhancing personal privacy.

a) Alternative access to individual houses

Being able to use a secondary access route to private homes, avoiding the pedestrian paths leading from the parking lots to the main entrances of houses, represents an important boost for personal privacy. It means that people who require privacy at certain times or in certain
situations can avoid the interactions that are bound to occur on the pedestrian ways or on the common Green areas of the community.

As one Swedish interviewee remarks,

“we know that sometimes you just want to come in without anybody bothering you, so next to the elevator we have a back entrance. So if you are really tired and don’t want to talk to other people, you can use that entrance, go straight into the elevator and from there into your own flat. And if you don’t want to show who you are bringing home, you can also use that entrance” (Interview with A.F., 2014).

Such a measure is easier to put into practice in ‘single-building’ communities, via secondary staircases. The visual analysis of the ‘multi-building’ communities reveals that in only two cases, all of the residents have the possibility to use a secondary route from the parking lot to their homes. Two factors are needed for allowing such a possibility: non-enclosed premises of the community; and pathways outside of the community linking the parking areas to the secondary entrances of private homes (see figures 18-28).

Site restrictions, financial issues, as well as the need to devise a layout that fosters a sense of community, mean that providing secondary routes to private homes is not a common characteristic of the studied communities (similar to the previous discussion regarding the visibility of the common house). In most of them only some of the properties located at the edge of the site have such access; and the data analysis does not reveal whether it was a conscious design decision or not. Most probably, the provision of such secondary routes to some of the houses is a result of the surroundings (pre-existing pathways and the non-enclosed character of the private courtyards from the community) more than a conscious design decision.

Only in the case of the studied communities using a ‘courtyard’ layout, with houses facing inwards (towards a common Green), the provision of such secondary routes to all individual properties appears entirely feasible. The two studied communities that allow for this are using indeed a ‘courtyard’ layout on their site (see figures 22 and 23).
Figure 32: Secondary accesses in cohousing. Source: Author, 2016.
However, site and financial restrictions mean that secondary routes to all private properties (within a community) are not to be found in the case of the other examples using the same layout. Therefore, while secondary access to private properties represents a welcome addition to enhancing personal privacy in cohousing; its feasibility in case of ‘multi-building’ communities can only be judged on a case by case basis.

b) Buffer zones in front of houses

Having buffer zones in front of private houses in the case of ‘multi-building’ communities represents another design measure aimed at enhancing personal privacy. In the researched communities, such buffer zones were in the form of (non-enclosed) front yards, or wooden decks. According to a Danish interviewee, their role is to signal the privacy of the houses:

“we have a wooden deck outside as well [in front of the big windows facing the common green], which we didn't have in the past, it was just grass out there; and people find out that sometimes kids could come really close to your windows, so the deck out there is also meant to be a sort of private area. If I am out there on the deck, it is kind of my private area” (Interview with J.L., 2014).

His partner adds that “some people [...] block their deck so you can't walk around them, and some people have it open” (Interview with N.L., 2014); depending on personal preferences. According to an UK interviewee as well, the buffer zone in front of his home is quite important for enhancing his privacy:

“but coming from a community, it was essential for me to have an area outside, because I enjoy a space outside that is actually private. Which is good because I don’t have to put on my ‘happy community face’: ‘Hello M., I need to see you about something!’ I can actually avoid that” (Interview with M.T., 2014).
Looking at the researched communities, the buffer zones represent a challenge for cohousing design: if they are enclosed, they could provide more privacy, however at the expense of having more open areas that enhance the sense of community; and vice-versa. Furthermore, given site restrictions and the ‘nature’ of cohousing(as people are supposed to live more closely together than in mainstream conditions) it appears that such buffer zones have more of a formal, psychological role: to signal the private space of individuals to others; however without offering the same degree of privacy as in standard, fenced housing. As one UK interviewee exemplifies,

“the site is very dense, the houses are very close together and the gardens are very small; so there is not much outdoor privacy! I can't sit in the garden naked and read the newspaper or something like that. But if I really need privacy, I can always go home and shut the door” (Interview with N.S., 2014).

c) Additional mechanisms enhancing privacy

Given the difficulties in applying the aforementioned two design measures (aimed at enhancing privacy) in practice; residents of the studied communities have devised additional mechanisms for enhancing their personal privacy. Such mechanisms, coupled with the character of the cohousing environment (ensuring that people have their own private house/flat), and in some cases with the aforementioned design measures, lead no fewer than 37 interviewees (ex 46) to remark that they have no issues whatsoever with personal privacy in their communities. Complaints regarding personal privacy are related to the density of the built environment or the large windows on the facades of private houses, in the case of ‘multi-building’ communities. Mechanisms for signalling privacy have been devised in less than half (7 ex 16) of the researched communities, as ways for ensuring that their need for privacy is respected. These are:
- **Unwritten rules** designed to respect the privacy of people in their front yards and back yards (or on their wooden decks, depending on the design). As one Danish interviewee mentions, there is an unwritten rule that

> “if you sit on your deck, people don't usually say that much to you. So they kind of respect it, like it is your private area while being outside; whereas if you step on the grass, you are kind of saying that you are open to socialising”  (Interview with N.L., 2014).

Extrapolating this measure to ‘single-building’ communities, three Swedish interviewees remark the reticence of residents to come and directly knock on someone’s door, as a mean of respecting personal privacy. According to one of them, if she does not feel like socializing, “I just close my door, and nobody comes to knock on my door, they call me; very seldom someone knocks on your door, maybe if someone is in a hurry or feels bad or something” (Interview with A.F., 2014).

Another interviewee agrees, remarking how people from their community have learned to differentiate between public and private spheres:

> “when you are in the common rooms, or the stairways and so on, everyone feels free to speak to you and say hello and ask you a few questions. When you're in your own flat, you are really private; no one knocks on the door. If someone wants to say something to you, they call or write an email, but they don't knock on the door because we need the privacy here” (Interview with K.F., 2014);

- **Using informal systems** to signal the disposition for socializing. According to one UK interviewee, most people in his community signalize their openness for socializing via the position of their blinds:

> “The blinds really signal to people. If I am on holiday, and I just stay here [at home] for a week, I let the blinds to the bottom; most days I put the blinds in the middle so that is kind of ‘so-so’. I can put them higher and that’s more welcoming, and I can put them
lower and people shouldn’t bother me. Although I’ve never told anybody, it is clear that people understand what is happening” (Interview with M.C., 2014).

In another UK community, a system involving placing a scarf on the main doors of private houses is in place: “we have a system, if you do not want to be disturbed for work reasons or personal reasons, you put a scarf on your door; so, put a scarf on the door and people will not annoy you” (Interview with A.T., 2014);

- Using body language to signal the disposition for socializing. As one UK interviewee remarks, “you kind of learn how to walk, to signal in a non-verbal way whether you are open to communication or closed to communication” (Interview with B.T., 2014).
8.3.3 Enhancing community identity through the architecture of buildings

A uniform architecture of the built environment, which stands out from the surrounding ‘mainstream’ built areas, can represent a factor that increases the sense of ownership among North-West European cohousing residents (Marcus, 2000). Six out of the 16 studied communities have an architecture that differentiates them from their surroundings, through:

- the uniformity of houses across the community (in case of ‘multi-building’ developments);
- the facades of houses (e.g. wooden façades in Springhill cohousing in an area with predominant brick facades);
- particular building’ shapes (e.g. the ‘banana form’ of the two corps of C.W. Het Kwartheel, or the ‘hexagon-like’ shape of BF. Lange Eng);
- large windows (e.g. BF. Absalon’s Have, and BF. Lange Eng);
- or through their retrofit character (e.g. Threshold cohousing).

In such cases, the architecture of the building(s) confers on the communities a certain identity, signalling their different character compared to mainstream housing. According to a Danish interviewee, one visitor had an interesting remark regarding the architecture of the houses in their community:

“if you see our houses, we have a lots of glass- glass windows from the ceiling to the floor; and she asked me- [...] ‘is that made because it is a community, so you don't hide, which you would normally do in a standard house, behind the fence and curtains?’” (Interview with L.A., 2014). In the opinion of the interviewee, the respective person raised an interesting point; because “if you walk around our area here you will feel more that it is a community [compared to a standard street], because you can look into people houses and so on” (Interview with L.A., 2014).
Enhancing community identity through architecture:

An architecture that stands out from the surroundings can confer a particular identity to a cohousing community, potentially enhancing the sense of ownership of its residents (Marcus, 2000). One can notice the differences between: the ‘banana-shaped’ CW Het Kwarteel community and its surroundings (lower right corner of first picture from the top); and the hexagonal shape of BK Lange Eng (lower right corner of second picture from the top) and the terraced standard housing in its vicinity. Springhill cohousing community also stands out from the surrounding built environment through its wooden facades (compared to the brick facades of the neighbouring houses). One resident actually mentioned that their neighbours sometimes refer to them as the people from the wooden houses (Interview with J.S., 2014).

Source: Bing Maps 3D for the first two images (from the top). The image of Springhill cohousing is taken from: http://www.architype.co.uk/img/projects/springhill-co-housing/2.jpg

Figure 33: Enhancing identity through architecture in cohousing. Source: Author, 2016.
Similarly, an interviewee from another Danish community reflects on the large windows, part of the facades of all houses (in their community):

“the main idea of the architect was actually to accentuate the closeness on the outside [towards the surrounding ‘mainstream’ houses] and the openness on the inside [towards the central Green and pedestrian path]” (Interview with L.L., 2014).

This results in a ‘very strong’ community motive (Interview with L.L., 2014), with certain downsides regarding personal privacy due to the big windows- “some people would find that awful and they would not even consider living here because everyone can see into my house” (Interview with N.L., 2014). However, for the three interviewees from the respective community, those big windows represent a key catalyst for developing a sense of community:

“you can see if there are people out there,[...] you feel that you are around people even if there is bad weather like today, you can see the lights and the neighbours around you. You are always aware that you are in a community that is alive, in a way, people are around you and you feel that presence” (Interview with N.L., 2014).

In addition to the architecture of the buildings, a certain community identity is also conferred through the open, non-enclosed nature of private outdoor spaces located right in front of individual houses (front courtyards/wooden decks). This practice has been noticed in two thirds of the studied ‘multi-building’ communities; and confers a feeling of openness, contrary to the traditional “idea for every man that his home is his castle” (Interview with M.T., 2014).

This design feature opposes such mainstream conceptions, as one Danish interviewee highlights:

“if you walk down most of the other streets around here, it is very fenced-off and people are waiting for their hedges to grow, so they can hide behind them” (Interview with T.G., 2014). He further mentions that their concept of open front yards feels
“more like they are inviting, and it feels more like a shared space; [since] you don't have a fence of 1.8 or 2 meters high around your house” (Interview with T.G., 2014).

In the communities applying this design measure, “most of the gardens are kind of 'growing together'; there is no fence so the lawn of my house is altogether with the lawn of the neighbours, so you can just walk over” (Interview with H.B., 2014). This measure is signalling the openness towards the community; however at the same time it can raise issues regarding personal privacy (as discussed in the previous section).
8.4 Conclusions of the chapter

The aim of this chapter has been to determine the effects of physical design on the long-term success of the studied cohousing communities. The data analysis has been comprised not only by the accounts of the interviewees; but also by a visual analysis of 11 communities (nine ‘multi-building’ and two ‘single-building’) for which such data was available. This also helps address a scarcity noticed in the cohousing literature in terms of: primary studies investigating the physical design of both single- and multi-dwelling cohousing; and of up to date, primary studies of European communities using a cross-sectional approach.

The vast majority of interviewees have mentioned that physical design is an important influencing factor in cohousing; affecting social interactions and the possibility for privacy. In this sense, the findings from this study can be seen as further empirical evidence supporting the views of environment-behaviour and social space theories regarding the influence of the built environment on human behaviour.

The findings highlight some similar design solutions similar to the ones mentioned by the cohousing literature: pedestrian pathways and off-site parking, location and visibility of common house/common areas, and orientation of private buildings (for enhancing interactions); and having buffer zones for enhancing privacy. Further contributing to the knowledgebase, the data analysis also reveals some additional measures from the ones mentioned in the literature:

- clustering some common household functions (e.g. mailboxes; laundry etc.) by the common house (in ‘multi-building’ communities) or by the entrance to the building (in ‘single-building’ communities), in order to foster causal interactions;

- using glazed walls in order to enhance the visibility of communal spaces in ‘single-building’ communities. If changes to the interior of the building are not possible; then alternative solutions for signalling the presence of people in common areas can be used (e.g. flashing lights on the corridor; smartphone applications);

- and where possible, enhancing privacy by providing secondary accesses to private houses, reachable from outside the community.
Another important finding was related to the difficulties that can occur when designing a community aimed at fostering interactions, while also retaining the possibility for personal privacy. The inherent tension between these two aims is transposed in the design, as some design measures enhance one aspect but are detrimental to the other, and vice-versa (e.g. non-enclosed front yards that signal the commitment to community values vs. the need for buffer zones that enhance the privacy of cohousing residents). This is why sometimes compromises need to be made; and why additional mechanisms for enhancing privacy have been used in the studied communities (e.g. signalling, unwritten rules etc.).
9) The environmental sustainability of cohousing

The environmental sustainability of cohousing communities can positively affect their success, by:

- reducing daily living costs due to lower energy requirements (Bamford, 2004; Williams, 2005a; Meltzer, 2005; Sundberg, 2014);
- enhancing the possibility to receive support from developers and authorities; given the wide-spread promotion of more sustainable lifestyles in the Western world (Brenton, 2001; Williams, 2005a; Williams, 2008; Cojan, 2013);
- increasing the personal well-being of residents due to a closer connection to nature (Sanguinetti, 2014).

As such, this chapter will deal with the environmental sustainability of the studied cohousing communities. The literature review on the topic reveals that the higher amount of sharing among neighbours, use of shared facilities, smaller footprint of individual homes, and easier dissemination of pro-environmental ideas and practices, lead to less resource consumption and associated carbon emissions (compared to mainstream settings). Previous studies revealed that US cohousing residents benefit from an average of “31% space savings; 57% electricity savings and 8% goods savings” (Williams, 2005a, p.159) compared to residents of
mainstream housing; whereas residents of a Swedish cohousing community residents produce 20% less carbon emissions compared to an average Swedish person (Sundberg, 2004).

Nonetheless, there is a gap in the research so far in terms of the scarcity of qualitative, cross-sectional studies of European communities that enhance existing quantitative studies by adding qualitative data. In view of this gap and of the main aim of the Thesis, the following research question has been devised:

*Does cohousing have the capacity to be more environmentally sustainable compared to mainstream living settings?*

### 9.1 The environmental sustainability of cohousing

Interviewees have mentioned that most residents of cohousing have a ‘light green’ ideology; much more reduced compared to ecovillages, for example (see motivation chapter). As such, environmentalism does not represent the main focus in any of the studied communities; although some of them make use (for different reasons such as research grants or obligations set by municipalities) of some impressive sustainable technologies (see annex I). Despite of this lack of strong environmental ideology, the literature mentions that the cohousing environment in itself offers the possibility for a more sustainable lifestyle than in mainstream settings (see: Meltzer, 2005; Williams, 2005a; Stratmann, Weiss-Ferreiro, Narayan, 2013). The data analysis for this study supports this view; revealing four categories where cohousing has the capacity to be more environmentally sustainable compared to mainstream settings (see table 9).
Environmental benefits of North-West European cohousing

| 1) A higher capacity for influencing pro-environmental behaviour | - Discussions and dissemination of environmental ideas and practices;  
| | - Influencing residents via social/environmental norms. |
| 2) A higher capacity for improving waste management | - Prevention and minimisation of food waste due to the communal meal system;  
| | - Enhanced possibilities for swapping, borrowing and sharing of items;  
| | - Enhanced possibilities for composting organic waste. |
| 3) A higher capacity for using the site more efficiently | - Using rows or clusters of terraced houses (a more energy efficient housing form compared to detached dwellings). |
| 4) A higher capacity for reduced energy consumption and carbon emissions | - Reducing energy use due to the communal meal system;  
| | - Reducing energy use due to shared facilities; |

Table 9: Environmental benefits of North-West European cohousing. Source: Author, 2015.

**a) A higher capacity for influencing pro-environmental behaviour**

Studies have shown that high levels of social capital can have an overall positive impact on the pro-environmental behaviours of individuals (Meltzer, 2005; Thoyre, 2011; Jin, 2013; Liu et al., 2014). This section will discuss how the higher social capital encountered in cohousing communities (compared to mainstream settings) can positively affect the environmental behaviour of its residents. It does so in two ways:

- through the easier dissemination of pro-environmental ideas and practices;
- and by influencing residents through social/environmental pressure.
**Dissemination of pro-environmental ideas and practices**

According to a Dutch interviewee, the lack of interaction and cooperation between neighbours from mainstream cities represent key factors behind their unsustainability: "technologies are there, that is not the limiting factor; the only thing that is limiting us in sustainable living are the social interactions" (Interview with H.W., 2014). He attributes the same critique to some self-advertised sustainable communities:

"I see a lot of projects that are fantastic, all the technologies are there; but they fail because they are unable to interact socially with each other! They live in communities with separate houses, and then you don't have to bother much with your neighbours; and they say that they are living sustainable, but it is like living in a normal city. If you want to be more sustainable, you have to share more things; and if you want to share more things, then you have to interact with each other more" (Interview with H.W., 2014).

Contrarily, in cohousing, the closer ties and higher levels of interaction between residents lead to ample opportunities for discussing and disseminating environmental ideas and practices. This results in an enhanced capacity for educating people on environmental issues, as mentioned by about a quarter of the interviewees (11 ex 46).

According to one Danish cohousing resident, in terms of pro-environmental practices, "you have people with whom you can exchange ideas and support each other" (Interview with J.L., 2014). One Swedish interviewee agrees, mentioning that contrary to modern, urban mainstream settings, in her community "we know one another; we learn from one another, we discuss so much about sustainable housing" (Interview with K.F., 2014).

An UK interviewee supports this view, remarking that in his community

“when it comes to living, I think people influence one another; so there are a few people who are interested in environmental practices and I think they influence other people” (Interview with M.C., 2014).
This view is also backed by a Danish interviewee who remarks that they have a more sustainable lifestyle compared to their prior mainstream settings; but that is because of the "cohousing environment in itself, not the technology in our community in particular" (Interview with L.A., 2014). Discussions on the topic of sustainability in some of the communities not only stimulate cohousing residents to think about environmental issues, but also the sharing of knowledge enables them to act upon such considerations. Cohousing residents "can act upon some of the things that [they] are seeing" (Interview with A.F., 2014). According to one Swedish interviewee

"perhaps you look at TV together and then you talk about it: 'Oh, they are doing that and that'; and at the time when you start to talk about something, you have it in your brain, and then it doesn't take too much time until it comes to action" (Interview with A.F., 2014).

The size of the researched communities (ranging from about 25 to 200 residents; averaging around 75) and the favourable circumstances for social interaction mean that the cohousing environment enhances the possibility for getting acquainted with fellow residents knowledgeable (or at least interested) in pro-environmental practices. As such, it is not uncommon for cohousing residents to follow the initiative of some of their more environmentally-motivated neighbours and join working groups concerned with improving the sustainability of their community. Such groups have been identified in half of the studied communities; and look at:

- alternative systems for heating and electricity generation, like solar panels or geothermal pumps;
- solutions for making better use of the available land;
- opportunities for growing organic food and, where possible, raising animals;
- solutions for increasing the recycling within the community and reducing their waste.

In two of the studied communities, environmentally-focused working groups initiated by knowledgeable residents managed to have bee hives installed on their roofs; a measure of importance especially in agglomerated areas (as it helps improve the urban ecosystem). Such
environmental features are even more pronounced in rural cohousing, due to the lower cost and higher availability of land. In a quarter of the researched communities the collaboration between residents with various skills led to the development of more complex, hand-made systems like polytunnels for the growth of organic food or biodigesters for the treating of waste water on-site.

**Influencing residents through social/environmental pressure**

Cohousing communities possess at times a pressure that influences its residents towards a more pro-environmental behaviour, through the use of informal, internal control measures. This is related to the need for ‘compliance to social/environmental norms’ (Jin, 2013); a parameter deemed by some scholars as important in affecting environmental behaviours (ibid.). In the studied communities, this compliance can happen in two ways:

- they will be noticed in cases of improper environmental behaviour such as incorrect recycling, as remarked by residents from three studied communities. According to an UK interviewee, “*I think there is some policing; I think people who recycle incorrectly will get told*” (Interview with M.C., 2014);

- or they will feel social pressure in cases of non-environmental habits and transport modes, such as flying (also remarked by residents from three of the studied communities). For example, the same interviewee suspects that “*people fly less because they feel that they are judged by other people*” (Interview with M.C., 2014).

A different example of such pressure comes from a Danish community. They have a system in place for making people aware if they use too much energy; as one responsible person reads the heating and water meters for all houses every month. He sends out reports to all residents,

“*so that you can see how much you have used compared to the others and to your own usage in the same period last year. This can help make people aware if they use too much*” (Interview with J.K., 2014).
**b) A higher capacity for improving waste management**

Ever since the 1987 report ‘Our common future’ (WCED, 1987) and the 1992 ‘Earth Summit’ from Rio highlighted the concept of sustainable development, strategies for a better handling of waste have been considered central to the concept (Phillips et al., 1999; Cojan, 2013; Kurdve et al., 2015). Waste is considered to be “an indication of excessive and inefficient use of natural resources” (Gottberg et al., 2005; p.38); while further negatively impacting the environment due to transport and disposal processes (ibid.).

Furthermore, contemporary Western consumption and production trends are considered unsustainable (Susse, 1999; Phillips et al., 1999; Tonglet, Phillips, Bates, 2004). As such, it is to no surprise that waste minimisation and recycling are significant to frameworks aimed at operationalizing sustainability characteristics (e.g. Kazimee, 2001; Carmona, 2001); and have been granted significant attention at supranational, national or local levels of government (Cojan, 2013).

Waste strategies, regardless of their institutional level, often base their approaches on a ‘waste management hierarchy’; determining the most desirable to the least desirable options for waste management (Gertsakis, Lewis, 2003; Tjell, 2005; European Commission, 2008; Gharfalkar et al., 2015; Williams, 2015).

![Waste management hierarchy](image)

*Figure 34: Waste management hierarchy. Source: Slideshare, 2016.*
Although the usefulness of implementing alternative models to the waste hierarchy for different scales is being debated (Gertsakis, Lewis, 2003; Bartl, 2014; Gharfalkar et al., 2015), the main considerations of the waste hierarchy remain present: that preventing, minimizing and reusing practices are more favoured options compared to the recycling, treating and disposing of waste. That is because “the simplest and most effective way of dealing with waste is to ensure that it does not arise” (DOE, 1998, in: Phillips et al., 1999, p.220); an argument due to which waste management strategies tend to focus on waste minimization and reuse in the first place.

The data analysis suggests that North-West European cohousing has the capacity for handling waste better than a traditional setting because of three considerations: prevention and minimisation of food waste due to the common meal system; enhanced possibilities for swapping, borrowing or sharing items; and enhanced possibilities for composting organic waste.

**Prevention or minimisation of food waste due to the common meal system**

Corresponding to the top of the ‘waste hierarchy’, the communal meal system used in most of the studied communities has an important impact on the prevention or minimization of food waste. That is of great importance in Western societies like the UK, where a study suggests that an average family throws away food (that could have been consumed) equivalent to six meals per week, or up to 60 pounds per month (WRAP, 2013). This is mainly due to excess cooking and not using it in time (ibid.).

Due to the common meal system, cohousing communities have a better capacity to deal with such waste. The efficiency of food waste minimisation in cohousing is dependent on factors such as the frequency of communal meals, size of the community and average number of people taking part in the meals; however in the long term the difference could be noticeable. As one Swedish interviewee remarks:

“in a standard family we know that about 30% of the food would be thrown away; I believe that we throw away much less than that” (Interview with O.U., 2014).
That is because cooking meals for a large number of people at the same time allows for the bulk purchasing of food. This practice brings economic and also environmental benefits, due to fewer individual trips. As one Dutch interviewee mentions, cohousing can be more environmentally sustainable than mainstream settings, also because “it would be easier if we would decide to buy organic food only or to arrange it in such a way as to be brought to us instead of going out to buy our groceries separately” (Interview with A.W., 2014).

Furthermore, the common meal system also reduces the amount of food that is thrown out: “you have a better chance of not wasting food when you cook for so many people” (Interview with H.B., 2014). After a while, people preparing the food are becoming more effective at controlling their budget and estimating the exact quantities required (for a specific number of persons taking part in a meal): “I think that people are getting better and better at the exact amounts needed for the common meals, it gets better with experience” (Interview with N.L., 2014).

In addition, some of the studied communities have developed practices to ensure that leftovers from the communal meals can be used by residents the following days, thus further minimizing food waste:

“with the food; we often have some leftovers but it is easier to collect the leftovers so that it is something you can use even the day after. So I don't think that we waste as much food as we would do otherwise. People can take it in a box and have it for lunch next day at work” (Interview with L.L., 2014).

Leftovers are either taken straight away by residents after communal meals; or are packaged in lunch boxes and are refrigerated or frozen. In this way people can eat them the next day, usually for lunch at work, either in exchange for a moderate fee or free:

“you have the opportunity to use the leftovers the next day. The next day, we can just take it home and take it with us for the lunch meal at work; so I would say that we waste very little food in this way” (Interview with H.B., 2014).
All these considerations make a Danish interviewee conclude that in their community

“we've got less food waste, for example. Because if you take 54 families and each cooks their individual meal, then there would be more food waste altogether than if we have common meals” (Interview with N.L., 2014).

Enhanced possibilities for swapping, borrowing or sharing items

The cohousing environment enhances the possibilities for the reuse of items among its residents, as mentioned by residents from about two thirds of the studied communities (11 ex 16). Three of the case studies even have dedicated ‘swap rooms’ where residents leave items they don’t use anymore; from children’s toys and clothes to books, chairs or various tools. In one Danish community,

“we have a room where you can put different things you don't need any more, like clothes or children's toys, chairs and so on. For example, we have bought very few clothes for our kids, you can just get them from neighbours” (Interview with N.L., 2014).

A similar principle is used in a Swedish community, where residents use a ‘swap corner’ instead of throwing out the things they no longer use:

“we also recycle some small items, we don't throw away the used things, we just put them in a special place and if the neighbours want them, they can take them. It is a small thing, but the principle matters, we try to recycle” (Interview with A.D., 2014).

The higher levels of interaction, subsequent bonds, and physical proximity between cohousing residents, mean that people in the studied communities are more at ease to borrow
items they need from one another. These can range from small everyday things to automobiles. According to an UK interviewee,

“I haven't replaced my washing machine, I haven't replaced my Hoover; I'm using the ones in the common house. All those things I think they are excellent [from a sustainability point of view]; but still we can lead quite a consumption lifestyle” (Interview with J.S., 2014).

Additionally, in almost all of the researched communities the gardening tools are shared so that individuals don’t need to buy their own. This is an aspect that differentiates cohousing communities from their immediate neighbours, who each own gardening tools despite of the reduced size of their gardens. As one Danish interviewee emphasizes,

“there is another thing I want to mention about sustainability [...] we have like a workshop with tools, we share these tools, we don't go and buy other tools; or example we don't have a lawnmower, we can just borrow it” (Interview with N.L., 2014).

Residents from about a third of the studied communities (6 ex 16) also mention the possibility to borrow tools from the communal kitchen on the days when communal meals are not planned (usually on weekends). For example, when having visitors in their private home, they can go down to the communal kitchen and borrow items like large frying pans or extra dishes:

“it is also convenient if I want to borrow something, I don't have to buy everything myself. We can share. If it is weekend and I need a bigger frying pan or something like that, I can just come to the kitchen and borrow it” (Interview with T.U., 2014).

**Enhanced possibilities for composting organic waste**

Corresponding to the ‘treating and disposing’ levels mentioned in the waste hierarchy, the data analysis reveals that cohousing enhances the opportunities for composting organic waste. Home-composting is a waste management option that brings environmental benefits such as:
enhancing the soil; reducing the pressure on centralized landfills; and cutting down gas emissions related to the transport, collection and disposal of organic waste in centralized landfills (Andersen et al., 2010; Sussman, Gifford, 2011).

There is the example of several cohousing communities from Stockholm, where the municipality decided not to take care of organic waste like elsewhere in Sweden. As such, cohousing residents had to organize it by themselves, on their site; and “that is something we wouldn't have on our own” (Interview with O.U, 2014). This is because they consider it easier to organize the composting of organic waste in a cohousing setting:

“here in Stockholm, the city has chosen not to do that; so we had to organise that ourselves, and that is easier if you are a cohousing community; if you wouldn't know your neighbour it would be more difficult to organise” (Interview with R.P., 2014).

c) A higher capacity for using the site more efficiently

Various frameworks aimed at enhancing urban sustainability mention the important impact of land-use planning on the local community and beyond (e.g. German Council for Sustainable Development, 2004; Litman, 2015); affecting among others public open space, transport costs, accessibility, community cohesion, energy use and pollution (ibid.). Consequently, strategies involving more environmentally efficient land-use planning are mentioned in sustainability frameworks (Carmona, 2001; Kazimee, 2001; Berke, 2002; Farr, 2008; Lynch et al, 2011). One of these strategies refers to the provision of a minimal density and a clustering of dwellings that result in more open spaces (ibid.).

The literature suggests that in the UK, energy use in buildings accounts for over half of the pollution generated in urban environments (Steemers, 2003). Among that, almost two-thirds is generated by the need to heat indoor spaces (ibid.). Domestic energy consumption depends on a number factors, such as: “location, design and construction of a dwelling [...], the
specification of heating systems and their controls together with [...] the behaviour and socio-demographical characteristics of occupants” (Yohanis et al., 2008). Studies recommend an increase in density and compactness of the built environment as a sound strategy for reducing heat loss through the building’s envelope (Steemers, 2003; Wall, 2006). Research indicates that on average, detached houses use between a quarter (in the winter) and a third (in the summer) more energy than terraced houses (Yohanis et al., 2008). This reinforces the statement that the latter is an overall better solution energy-wise compared to detached dwellings (Steemers, 2003).

The visual analysis of the ‘multi-dwelling’ communities from the design chapter shows that seven of the nine such researched communities employ a building form that is more energy efficient compared to traditional detached dwellings: rows or clusters of terraced dwellings; aimed at making best use of the available site in terms of creating open spaces and encouraging social interaction. As seen above, this form of dwellings also brings with it environmental benefits: higher energy efficiency compared to the more common, detached dwellings. This can be particularly useful when looking at the general trend in the UK, where detached and semi-detached dwellings account for around 60% of the total owner-occupied housing stock (Nationwide, 2013). This is almost double compared to the more energy-efficient terraced houses and apartments in blocks of flats (ibid.).

Furthermore, the use of rows or clusters of terraced houses combined with the lack of vehicles on-site (in all but one of the studied communities), has led to the creation of open outdoor spaces. These green spaces are particularly significant for communities using a ‘courtyard’ layout (about half of the studied ‘multi-dwelling’ communities). Their role is to increase the social interactions and well-being of the residents; however they yield environmental advantages as well. This is because green spaces in a built environment can:

- reduce pollution and improve microclimatic conditions, by absorbing carbon dioxide (and other gases) and replenishing the atmosphere with oxygen (DTLR, 2002; Giorgi, Dimitriou, 2010);

- act as a natural temperature buffer, with the potential to decrease the need for heating and cooling (ibid.).
- protect biodiversity by conserving and enhancing natural habitats (DTLR, 2002); play “a positive role in rainwater-runoff reduction” (Zhang et al, 2012, p.65); and act as a natural noise insulator.

d) A higher capacity for reduced energy consumption and carbon emissions

Interviewees from the studied communities are of the opinion that cohousing accounts for reduced energy consumption (and associated carbon emissions) compared to mainstream living settings. They give three reasons for this: lower energy use due to the communal meal system; lower energy use due to shared facilities; and deriving advantages from the size of the communities.

**Lower energy use due to the communal meal system**

According to some interviewees, the communal meal system contributes to an overall lower energy use in cohousing. This is in agreement with Sundberg’s research, who mentions that the more frequent the communal meals, the better it is energy-wise for the community (Sundberg, 2014). As one Danish interviewee emphasises, "instead of 26 houses all firing up their oven, it is probably a little bit more efficient that we only cook in one place" (Interview with T.A., 2014). This consideration is also based on the reduced overall need for auto vehicle trips to super markets or grocery shops because of communal meals:

"resource-wise, it is more effective to cook food together with everything from transport to cooking; [...] it is also more sustainable, instead of each family driving their car to the mall" (Interview with R.P., 2014).

One Danish interviewee has calculated that

“since we don't cook much in our own house, we don't pay much in terms of electricity. So I think that a house in a standard setting will pay four times more than what I pay now in terms of electricity” (Interview with H.J., 2014).
This calculation does not take into account the amount of energy used in the common house, which is substantial considering that they have common meals seven days per week. Nonetheless, he considers their average energy use to still be lower compared to mainstream settings, even if the extensive use of the common house is taken into account: “it would still be less than normal” (Interview with H.J., 2014).

Another example is represented by one of the researched Danish communities, prompted by the local municipality as the site with the lowest water usage in their area. Given the lack of communal laundry in that particular community, one interviewee suspects that the communal meals and industrial dishwasher equipping the community's communal kitchen are responsible for this feat:

“they found out that our place is the one from the whole municipality who uses less water; we were surprised too because we don’t know really why. Maybe because of our frequent common meals and of the large industrial dishwasher we have, we don't know for sure, but it is just the way it is. And our houses are built by the same contractor as the ones around us, so there are the same building standards in use. And yet, we use a lot less water” (Interview with L.L., 2014).

Looking back at Sundberg’s research undertaken in her community (see: Sundberg, 2014), a Swedish interviewee mentions that

“in this community today, we produce one tonne less CO2 compared to a normal person living in a standard housing” (Interview with K.F., 2014). She attributes this to two key factors: “the most important thing is that we have smaller personal space and we use less electricity because of that and because we cook together” (Interview with K.F., 2014).

Furthermore, some of the researched communities serve only vegetarian dishes for communal meals, a practice that reduces emissions to about a half compared to regular meals involving
meat (Leuenberger, Jungbluth, Büsser, 2010). Studies have shown that “the average global warming potential and the environmental impact of meat based meals are considerable higher than for vegetarian meals” (Leuenberger, Jungbluth, Büsser, 2010, p.4). As such, a vegetarian diet “makes a significant contribution to the reduction of the global warming potential due to food consumption” (ibid.).

As one UK interviewee highlights,

"most of our meals are vegan, so that is one of the most environmental friendly things you can do. So the meat-eater meat consumption has dropped drastically, if they eat in the common house. If they were on their own they would have eaten meat, but because they go into the common house, where vegan meals are served, which might be 10% of the carbon footprint of the meat meal” (Interview with M.C., 2014).

Whether or not vegetarian dishes are served at communal meals is a matter of choice depending on the community and on the preferences of the chief cook responsible for that day. However, in the long term, and especially in communities with a higher frequency of communal meals, the practice of serving vegetarian meals can enhance the environmental sustainability of cohousing communities.

**Lower energy use due to shared facilities**

The use of shared facilities also contributes to lower energy consumption in the researched communities. The existence of a communal laundry is seen as a primary factor in this regard, as it negates the need for individual ownership of washing machines, thus contributing to an overall lower consumption in the community.

In the UK, domestic washing and drying of clothes accounts for about 13% of the total water usage, and for about 5% of the total energy consumption for an average household (NEA, 2015). The private ownership of washing machines and dryers in individual households amounts to 94% and 42% respectively (Borg et al., 2011). Research pointed out the environmental benefits of a communal laundry compared to the individual ownership of laundry appliances in an apartment block; as it can lead (due to ‘economies of scale’) to:
- the introduction of “commercial type washing machines and dryers, thus improving on the energy consumption” (ibid., p.5);
- easier access to highly energy efficient appliances;
- a much more energy-efficient “shift in user behaviour towards larger but less frequent washing and drying cycles” (ibid.).

In view of these considerations, discussions with interviewees and field observations reveal that about two thirds of the researched communities (11 ex 16) make use of communal laundries and more energy-efficient washing machines/dryers. Besides communal laundries, the use of other shared facilities available to cohousing residents, such as living rooms, IT corners, offices or hobby rooms, also contribute to lower energy consumption. Residents will gather around in the communal areas to watch important sport events, music contests or movie projections. As one Dutch interviewee highlights,

"if there is a movie or an event that more people want to see, we can watch it here [in the common living room]; otherwise we would all watch TV in our own houses and we would have more consumption" (Interview with M.R., 2014).

Advantages derived from the size of cohousing communities

Some of the studied communities made use of the ‘economies of scale’ factor in order to access sustainable systems which would have been unaffordable for their residents individually. District heating, solar panels, geothermal pumps, alternative drainage or rainwater harvesting systems are some of the technologies existent in cohousing (see annex I).

Suggestive in this regard is the case of a studied UK community. One of the founding members mentioned that the economies of scale allowed them to bulk buy highly efficient building materials and to upgrade their homes to Passivhouse standard. This has been achieved with no additional costs compared to similar, yet much less efficient houses available in mainstream settings (Interview with M.C., 2014). Although not all researched communities have sustainable systems installed (due to a number of reasons ranging from ownership, development fatigue, financial considerations or complete lack of interest in
environmental ideology), almost all interviewees highlighted the potential of the cohousing setting and scale in terms of easier access to them. Interviewees feel that they can pool money together and receive support from their fellow neighbours, thus allowing them to do things which they would have been much more reluctant on their own.

In terms of acquiring solar panels, one Dutch interviewee notes that “you don’t have so much power if you live on your own, it is different if you do it on your own or if you do it in a group of 20 people” (Interview with E.H., 2014). A Danish interviewee has the same opinion, mentioning that in her community “you can pool money together to do things that you would be much more reluctant to do on your own” (Interview with L.L., 2014).

Furthermore, the size of cohousing communities opens up possibilities for receiving significant grants and other subsidies from interested authorities in order to make use of sustainable systems. This was the case for two studied communities: one from the UK, and one from the Netherlands. In case of the former they had solar panels installed for a very low sum on all dwellings, in exchange for being researched in terms of energy consumption and behaviour for a number of years. As one interviewee recalls,

“it coincided with the scheme that the Department for Trade and Industry was running; so we had a big grant of £80,000 or something like that to install the PV panels. As long as the government could use them for its research purposes, to judge their efficiency. So that helped a lot. And for the first five years that we were here, the local university was running a monitoring system regarding the use of renewable energy: how much we were generating, how much we were using and how much we were putting into the grid; as part of the government research” (Interview with M.S., 2014).

In the second case, a Dutch municipality sold a large site to the cohousing association at a fixed, relatively low price. In exchange, the community was obliged to construct dwellings with high environmental standards, and install sustainable systems:

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“we had to reduce [...] the energy use for a house from 70% to 40% to make it sustainable. And we were obliged to do so by the municipality. [...] But it was a choice from the municipality to make a sustainable area, with the whole infrastructure. If we wouldn’t have had a cooperation with the municipality, we wouldn’t be able to realise that” (Interview with H.K., 2014).

This agreement between the municipality and the cohousing association has led to an impressive amount of sustainable systems in the respective community:

“we have solar thermal panels for hot water; our waters are divided, the rainwater goes straight into pumps, and our kitchen and bathroom water goes into refills. The black water goes directly into the sewers. And we have already built in a system for biogas that uses black water, but it hasn’t been operated until now. We also have an underground heating net [...] similar to a geothermal system; [...] so our carbon footprint is quite low” (Interview with H.K., 2014).

In addition, another interviewee from the same community adds that “we have floor heating, [and...] we also have very thick windows [glazing]” (Interview with M.K., 2014). She also highlights the sustainable character of their community, which leads to low energy costs (Interview with M.K., 2014).
9.2 Conclusions of the chapter

The aim of this chapter has been to determine the environmental sustainability of cohousing; at the same time adding a qualitative approach to the existing literature on the topic. The qualitative data analysis from this chapter confirms the overarching view of the literature that cohousing is more environmentally sustainable than mainstream settings (e.g. Meltzer, 2000; Meltzer, 2005; Williams, 2005a; Sundberg, 2014). The findings expand the view of the literature by adding two more categories- better waste management and more efficient use of the site- to the list of potential advantages of cohousing, in terms of environmental sustainability.

Furthermore, the findings from this chapter are in line with the studies suggesting that pro-environmental behaviour is a positive externality of social capital (e.g. Thoyre, 2011; Jin, 2013; Liu et al., 2014). Nonetheless, it must be reiterated that the findings are based solely on the opinions of interviewees; as collecting quantitative data was beyond the scope of this study. In order to have a comprehensive overview on the environmental sustainability of cohousing, quantitative research to test the qualitative findings from this study (as well as validate findings from prior studies) would be advised.
10) Conclusions

This study is the result of a partnership between Cardiff Metropolitan University and Bron Afon Community Housing, a Welsh social housing landlord looking at ‘alternative’ housing solutions (because of the current housing context in Wales). It has set out to explore the factors that affect the long-term success of North-West European cohousing; in view of their possible application in the context of Bron Afon and Wales. This overarching aim was divided into two research questions:

1) What are the factors that influence the long-term success of North-West European cohousing communities?

2) How can the lessons from North-West European cohousing be applied in the context of Wales, generally, and Bron Afon, particularly?

This PhD dissertation has dealt with the above first research question; by making use of: in-depth, semi-structured interviews with 46 residents of 16 cohousing communities across four North-West European countries (Sweden, Denmark, the Netherlands and the UK); and visual analysis of the studied communities via means of GIS software.

The theoretical framework of this study has been based on two types of theories: the ones highlighting the link between the built environment and human behaviour (social space and environment-behaviour theories); and the ones highlighting the link between participation and engagement in the community, and the development of trust, reciprocity and bonds between neighbours; which in turn lead to higher social cohesion (social capital theory). Drawing upon these theories; it can be stated that the long-term success of cohousing can be influenced by its physical design, as well as by other factors related to the levels of participation and interaction in cohousing (motivation, development process, participatory practices and self-management).

Supporting this line of thought, preliminary research suggests five ‘grand’ categories of factors that influence the long-term success of cohousing: motivation, development process, design of the site, environmental sustainability and interactions. As a result of preliminary research and of the review of cohousing literature, eight research questions supporting the main aim of this PhD dissertation were developed (see table 10).
Following these research questions, the findings from this study reveal factors from each of the ‘grand’ categories that affect the long-term success of the studied communities (interactions are key for each of the other four categories; and as such were discussed as part of each of them, rather than as a separate category). The factors determined by each of these categories represent the answer to the main research question of the Thesis (see figure 35).

Figure 35: Graphical representation of the key findings from this study. Source: Author, 2016.
10.1 Synthesis of the findings from this study

The key findings are chapter-specific and were discussed within the respective analysis chapters: Motivation (chapter VI); Development process (chapter VII); Physical design (chapter VIII); and Environmental sustainability (chapter IX). The following table represents the synthesis of these findings:

<table>
<thead>
<tr>
<th>What are the factors that influence the cohesiveness of North-West European cohousing communities?</th>
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<tbody>
<tr>
<td><strong>I) Motivation</strong></td>
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<tr>
<td><strong>1) What motivates people to engage in cohousing?</strong></td>
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<tr>
<td>Primary motives:</td>
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<tr>
<td>- Enhanced sense of community, while maintaining individual privacy (vast majority of interviewees);</td>
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<tr>
<td>- Material considerations.</td>
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<td>Secondary motives:</td>
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<tr>
<td>- Practical considerations;</td>
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<tr>
<td>- Enhanced opportunities for self-development;</td>
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<tr>
<td>- Receiving help with child-care;</td>
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<tr>
<td>- A positive environment for children;</td>
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<tr>
<td>- Other considerations: receiving emotional support; avoiding limitations from other types of intentional communities; environmental considerations.</td>
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<tr>
<td><strong>2) How do the main motives for participation affect the long-term success of cohousing communities?</strong></td>
</tr>
<tr>
<td>a) Enhanced sense of community, while maintaining individual privacy:</td>
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<tr>
<td>- Leads to higher interactions in cohousing compared to mainstream settings. These enhance the development of trust/bonds/friendships among residents;</td>
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<tr>
<td>- Realising the secondary motives for participation mentioned by interviewees depends on the development of bonds/friendships and informal support networks among residents;</td>
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<tr>
<td>- Individuals with unrealistic expectations regarding the level of community and support being left disappointed.</td>
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<tr>
<td>b) Material considerations:</td>
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<tr>
<td>- If material considerations, such as access to better housing, are the primary motive for individuals to participate in cohousing, then the cohesiveness of the communities can suffer (because of reduced interest in developing a sense of community).</td>
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</tbody>
</table>
| 3) Can the impact of conflicting motivational priorities in cohousing be lessened? | Yes.  
- By allowing a degree of ‘managed flexibility’ in the everyday functioning of the community in order to cater for people in different life situations;  
- By fostering a 'sense of ownership' among residents through an inclusive decision-making system. |

| 4) How are cohousing communities being developed? | Stages of development:  
- Three main stages for the development of the studied communities: initial, formation, and final;  
Models of development:  
- Three models of development (based on Williams’ classification) have been noticed in the studied communities: resident-led, partnership; speculative (top-down). |

| 5) Does the development process affect the cohesiveness of cohousing communities? | Yes, it greatly helps in the formation of a united group due to:  
- the constant interactions among future residents before moving in;  
- the need to find consent in order to create a functional community;  
- the possibility of overcoming important difficulties as a group, if they arise;  
- and the possibility of filtering out unsure people or people who do not fit (with the values that are predominant) in certain communities. |

| 6) What are the barriers and enablers for the development process of cohousing? | Barriers:  
- high time and energy requirements of the participatory process;  
- lack of sufficient financial capital and financial risks;  
- struggles with local authorities due to preconceived ideas.  
Enablers:  
A partnership with a developer; and support from local authorities:  
- in terms of extensive time and energy requirements, through a partnership with a developer that takes some |
<table>
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<tr>
<th>III) Physical Design</th>
<th>technical responsibilities away from the future residents;</th>
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<tbody>
<tr>
<td></td>
<td>- in terms of finances, through a partnership with a developer willing to assume the financial responsibility for the physical construction of the community. Furthermore, various premiums on land for development, or in rare cases, direct financial subsidies received from the local authorities can help in this regard;</td>
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<td>- in terms of the struggles caused by preconceived ideas from local planning organizations, via receiving the support of local authorities for the development.</td>
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<td></td>
<td>- developing a long-term collaboration with the developer; if it becomes the landlord of the community.</td>
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<td>7) Does the physical design impact the long-term success of cohousing?</td>
<td>Yes (positively), by:</td>
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<tr>
<td></td>
<td>Fostering social interaction, through:</td>
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<td></td>
<td>- measures related to outdoor areas: a lack of cars on-site; use of pedestrian pathways; more outdoor meeting spaces;</td>
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<td></td>
<td>- measures related to the common spaces: location and visibility of common house/areas; coralling some common household functions by the common house (‘multi-building’ communities) or by the main entrance of the dwelling (‘single-building’ communities); orientation of private houses;</td>
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<td>Enabling personal privacy, through:</td>
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<td>- residents having their own, fully-functional houses;</td>
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<td></td>
<td>- design measures aimed at enhancing personal privacy: providing secondary accesses to private houses, reachable from outside the community; and having buffer zones for houses, such as private front yards/wooden decks;</td>
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<td></td>
<td>- additional ‘mechanisms’ aimed at enhancing privacy: unwritten rules regarding use of private spaces within the community; or systems signalling disposition for socializing;</td>
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<td></td>
<td>Creating an ‘identity’, through:</td>
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<td>- an architecture that stands out to the surroundings; and the provision of non-enclosed outdoor spaces.</td>
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</tbody>
</table>
8) Does cohousing have the capacity to be more environmentally sustainable compared to mainstream living settings?

Yes, because of:
- a higher capacity for influencing environmental behaviour;
- a higher capacity for better waste management;
- a higher capacity for using the site more efficiently;
- a higher capacity for reduced energy consumption and associated carbon emissions.

Table 10: Synthesis of the findings from this study. Source: Author, 2016.

10.2 Reflections on the findings

a) Remarks about the findings from this study

Before reflecting on the findings, it is important to mention that they are applicable only for the cohousing residents that were interviewed for this study. This means that the findings cannot be generalized to all members of the studied communities, or to other cohousing communities.

Furthermore, it is important to mention that this study does not imply that the factors discussed throughout this Thesis are the only ones influencing the long-term success of cohousing communities. The analysis of data only revealed the influencing factors discussed throughout the Thesis; however other factors for which data from this study was inconclusive could be important as well.

To exemplify, the literature mentions that generally in cohousing, the size of private homes is smaller compared to the national averages for the respective countries (due to ‘devolving’ some space from private homes to the shared facilities of the community). The data from this study is inconclusive in this regard, as (with few exceptions) private homes from studied communities seem to have the same size as mainstream housing.

Another aspect of cohousing that could influence its long-term success is the theoretical ideal size for a community. The researched case-examples differ in size significantly; and with the
exception of few differing opinions from interviewees who touched this topic, an ‘ideal’ size for a cohousing community could not be determined with the available data.

The decision-making process is another potential factor affecting the long-term success of cohousing, for which data from this study was inconclusive. The studied communities use either consensus (UK communities) or majority-voting (Sweden, Denmark, Netherlands) for taking decisions; however regardless of the system, opinions of interviewees are split almost evenly regarding whether they are efficient or not. Both systems come with advantages and disadvantages, in the opinions of interviewees: on one hand consensus decision-making, albeit inclusive, could be inapplicable in larger communities (due to the time and energy required to reach a common solution even for the simplest things); while on the other hand majority-voting, although much more efficient time-wise, does not usually have the ability to take everybody on-board.

Some interviewees mention an in-between solution (to the two decision-making systems) as being more desirable, with cohousing residents striving not for consensus, but for ‘consent’. It means that even though not all residents will agree on a certain decision, time and energy should be spent on making sure that everybody’s opinion is heard, discussed and taken into account before developing a proposal and voting. This measure is aimed at receiving the consent of all residents, even if some do not agree with a particular decision (see third research question from the motivation chapter).

In addition to these factors for which data from this study was inconclusive, there might be additional factors that could influence the long-term success of cohousing as well. With these considerations in mind, this section now turns to reflecting on the key factors influencing the cohesiveness of cohousing that emerged from this study.
b) Key overall considerations about the findings from this study

The main aim of this PhD dissertation has been to determine the factors that influence the long-term success of cohousing. In view of this aim and looking back at the research process, it must be mentioned that from the early stages of this study, two ‘impressions’ regarding cohousing became apparent: that cohousing communities are complex, ‘multi-faceted’ social structures; and that they seek to resolve an inherent tension between two rather opposite aspects: communality and privacy. The literature review, preliminary research and ultimately the findings from this study suggest that these two initial impressions were correct. They had implications on the research design, and were mirrored in the findings.

Implications of the ‘multi-faceted’ nature of cohousing on research design and findings: Secular intentional communities in general, and cohousing in particular, are complex social structures. Members decide voluntarily whether to join or not. They are free to decide how long to stay and when to leave; even though some restrictions aimed at safeguarding the interests of the community can be present (e.g. regarding the sale of houses; or if people refuse to participate in compulsory activities). The organization and maintenance of the community requires involvement and some sort of agreement between residents, due to the lack of a hierarchical structure.

Physical design and activities need to cater for the ‘overarching scope’ of cohousing, if it can be called like this: having a higher sense of community compared to mainstream settings, while retaining the possibility for privacy. Before moving in, a lot of effort is usually required in order to make the idea for living in cohousing a reality. Even with external help for financial and technical aspects, this requires involvement and reaching common solutions between an (often changing) group of people. Sustainability is an issue as well, due to: the possibilities of a larger group compared to single individuals; and the different levels of interactions and commitments in cohousing compared to those between mainstream neighbours.

All these different aspects need to be taken into account in order to have some sort of overview on cohousing. Because the main aim of this study was to determine the factors that influence the long-term success of cohousing, this meant that (unlike most studies on
cohousing) it had to focus on more than just one of these aspects of cohousing. The research design had to take this into account. Thus, the answer to the main research question of this Thesis reveals factors from different spheres that affect the success of the studied communities: motivation, development, design, and environmental sustainability.

Because this thesis might be used as a starting point for the practical development of cohousing, these four ‘grand’ categories of influencing factors were tackled in a logical, chronological progression. The discussion of the findings started with the motivation of individuals for participating in cohousing; which influences the development process and the physical design, the latter being an important talking point during the development process. Together, all these three shape the interactions and participatory practices in the future community. Such interactions influence not only environmental sustainability, but also help fulfil the additional motives mentioned by interviewees for participating in cohousing. This shows that even though the influencing factors are from different areas, they are interlinked during the lifespan of cohousing communities.

All of the above considerations reflect the complexity of cohousing; and the challenges it poses for a research study that focuses on more than one of its aspects. Nonetheless, such a ‘holistic’ approach to cohousing is required for the main aim of this study. It can yield benefits for practical purposes as well, as individuals/organizations interested in developing cohousing need to be aware of its ‘multi-faceted’ nature.

Finding a balance between community and privacy- the crux of life in cohousing: The data analysis has revealed that interactions between cohousing residents are crucial for establishing a sense of community. From the early stages of the development process, the initial group meets in order to agree on a vision and find solutions for making their vision a reality. After moving in, cohousing residents devise various systems in place in order to manage and establish a sense of community. In most researched communities, this is realised through recurring shared activities, voluntary or compulsory: communal meals, working days, seasonal parties, gatherings for various cultural and sporting events, fieldtrips etc. Furthermore, the decision-making system that governs the studied communities requires
involvement and interaction between residents, which can become quite difficult due to opposing views and interests. Same with working groups devised for tackling various practicalities within communities (e.g. PR, accounting, maintenance, gardening etc.), or created around common hobbies (e.g. yoga group, reading group, meditation group etc.).

Through interactions, participatory practices and purposeful physical design, a sense of community is created and maintained in cohousing. However, herein lies the tension and crux of the cohousing model. Residents have mentioned that the appeal of cohousing is that it offers an enhanced sense of community, made possible by the aforementioned interactions; while at the same time allowing for personal privacy, if so desired. Interviewees seek a standard private/family life; enhanced by a higher sense of community compared to mainstream settings. This ‘best of both worlds’ aspiration, coupled with a generally less ‘progressive’ ideology (in most studied communities), differentiates cohousing from other communal arrangements from the past. This means that generally speaking, cohousing aspires to find a balance between two opposing needs: personal privacy on one hand; and an enhanced sense of community, on the other.

Interviewees have mentioned that this balance between community and privacy can vary; some communities being more or less closer to one of these attributes. However, in each of the 16 studied communities some balance between community life and socializing on one hand, and privacy on another hand, was in place. This striving for balance can be linked to all four categories of factors that have been found to influence the long-term success of cohousing. It is most evident when discussing the motivation of residents for participating in cohousing; and the influence of physical design.

In relation to motivation, the interviews suggest that this balance is important for attaining the aspirations that residents have from cohousing. On one hand, without interactions, a sense of community and bonds/friendships between residents could not develop. Consequently, aspiration for more community compared to mainstream settings could not be fulfilled. On the other hand, interviewees have mentioned that people who are too invested in the communality side of cohousing are left disappointed in their communities. This is because cohousing does not offer the level of interaction, formal support and sharing that people would expect from communes, for example.
The tension between these two extremes can be noticed in case of the purposeful physical design of the studied communities as well. On one hand, the built environment is designed to foster casual social interaction, an important factor for developing a sense of community in cohousing (McCammant, Durrett, 1994; Torres-Antonini, 2001; Williams, 2005b). On the other hand, design measures that allow for privacy are incorporated in the design of the studied communities as well. The main feature of the built environment that allows for privacy is that all residents have fully-functional flats/houses. This is the case in all studied communities; however as interviewees suggested, this is not always enough.

Additional design measures such as ‘buffer zones’ (front yards, wooden terraces) or secondary accesses from outside the communities are required for enhancing privacy. When physical/financial/development constraints made such measures impracticable, mechanisms for signalling the need for privacy have been developed among cohousing residents. All these measures highlight the importance given to privacy when designing cohousing. Nonetheless, finding this balance in practice can be difficult. For example, buffer zones represent a dilemma: if they are not enclosed they can enhance the sense of community and symbolize openness, however at the expense of personal privacy; and vice-versa. Design choices in this regard vary from community to community; depending on their values, desires, and local conditions.

To sum up, an overview of the findings from this study shows that having a balance between community and privacy is a key feature for cohousing. It has been deemed as important by residents from all studied communities; and is relevant for all four categories of factors that influence cohesiveness determined by this study.
c) Differences between the four North-West European countries part of this study

It is beyond the scope of this study to make a comparative analysis of the differences between the four researched North-West European countries in terms of cohousing. The findings were, with few exceptions, distributed quite uniformly among the four countries. This might suggest that in the case of North-Western Europe, the long-term success of cohousing is more related to the model itself than to the particularities of each country. Such a view is concurrent with the opinions of some scholars about the adaptability of the cohousing model (see: Meltzer, 2005; Williams, 2005a; Williams, 2008); although cultural and institutional differences between countries can still play an important role, especially during the development stages.

That being said, a few differences between the four researched countries emerged from the data analysis. The most important is the difference in history and tradition between cohousing in the UK and the other three countries (Sweden, Denmark, the Netherlands), where cohousing has existed for over four decades. Although few communities labelled as cohousing have existed in the UK for several decades; the first communities to have all characteristics of cohousing appeared in the UK in the early/mid 2000s. Compared to the studied communities from the other three countries, both studied UK communities emerging in that time period had to fight the hostility of planning authorities and their neighbours during their development. Interviewees consider that the hostility was generated by the novelty of the concept for the UK, coupled with prejudices regarding communal living. This is reflected in the institutional sphere, as for now UK cohousing lacks the support from authorities existent in other countries. However, their perception regarding cohousing might change once more communities are developed.

The best example for such support would be Stockholm, where the municipality is obliged to provide housing for people interested in communal living. Interviewees from different researched Swedish communities consider that the financial and technical help received from a housing association belonging to the municipality has been a key factor contributing to the development of cohousing in the city. In Denmark and the Netherlands as well, local authorities have been generally sympathetic (at least in the past) to cohousing, according to interviewees. They offered land for development at discount prices; and even financial subsidies.
Another difference between the UK and the three other researched countries (resulting from the incipiency of cohousing in the former) can be related to ideology. Interviewees from all three studied UK communities have had previous communal experience; whereas in the other three countries most didn’t. In all studied UK communities consensus decision-making is used; whereas in all non-UK studied communities majority voting is used. Half of the interviewees from UK communities consider cohousing as a potential substitute for the nuclear family; contrary to the other three researched countries where only a very small minority of interviewees are of this opinion.

All these suggest that the researched UK communities are somewhat more ‘ideological’ (in cohousing terms) compared to their non-UK counterparts; meaning that they put more emphasis on a communal ideology compared to most non-UK researched communities. Nonetheless, this does not mean that finding a balance between communality and privacy is not a prime concern in the researched UK communities as well. This concern has been highlighted by basically all UK interviewees.

Going back to overall differences between the four countries, Sweden also stands out. Most cohousing communities there are built as blocks of flats (‘single-building’ communities). This choice is influenced by their location in urban areas, more common in Sweden compared to the other three countries; however the climate and ‘Swedish mentality’ of preferring indoor solutions also contributes to this, according to an interviewee. These factors could explain the much higher proportion of ‘single-building’ communities in Sweden compared to the other three countries.
10.3 Theoretical and Policy Implications of the study

a) Theoretical Implications

This study contributed to the development of the academic knowledgebase on cohousing in two ways. First, it determined some gaps in the knowledgebase following the review of academic studies that tackled the topics of motivation, development process, physical design and environmental sustainability in cohousing. On one hand, some gaps result from the research design of existing studies. Hence, there was a need for:

- researching well-established cohousing communities in order to verify the findings from studies that dealt with the topic of motivation in incipient North-American cohousing communities (Jeske, 1992; Sullivan-Catlin, 1998); and for qualitative insights to support the quantitative studies undertaken on the topic (Choi, 2004; Choi, Paulsson, 2011; Choi, 2013);

- a cross-sectional approach that can give a broader perspective to the recent studies on the development process of cohousing, focused on a single case-example each (Ruiu, 2015; Scanlon, Fernandez, 2015);

- a study that investigates the physical design in both ‘single-‘ and ‘multi-building’ cohousing communities;

- a study that brings qualitative insights on the environmental sustainability of cohousing.

On the other hand, some gaps in the academic knowledgebase result from the focus of existing studies. Hence, there was a need for:

- research that looks beyond individual motives for participation; investigating how they can influence the long-term success of cohousing;

- research that looks in-depth at the implications of the various development models on the success of communities;
research that investigates the role of the built environment on human behaviour; given the scarcity of empirical studies underpinning environment-behaviour theories (Torres-Antonini, 2001).

Second, and more importantly, this study contributed to the development of the academic knowledgebase on cohousing by attempting to help address the aforementioned considerations. The research design reflects this endeavour.

In terms of motivation, the findings from this study:

- validated through a cross-sectional qualitative analysis of well-established communities the motives for participation in cohousing mentioned by earlier studies (Jeske, 1992; Sullivan-Catlin, 1998; Choi, 2004; Choi, 2013). They also validated two of Catherine-Sullivan’s practices (linked to interactions and reciprocity) for lessening divergent motivational priorities in cohousing;

- revealed that the motivation of individuals for participating in cohousing represents a key factor that influences the long-term success of cohousing. It does so, because the main motive for participation mentioned by the vast majority of interviewees (enhancing community, while retaining privacy) results in higher levels of interaction and participation compared to mainstream settings. These higher levels lead to the development of trust, reciprocity and bonds between residents; important requirements for the fulfilment of social and practical motives for participating in cohousing. Additionally, the findings have shown that unrealistic expectations (regarding the level of available support) and material considerations as main motives for participating in cohousing can have negative effect on communities. This further highlights the need for having a certain balance between community and privacy in cohousing;

- highlighted two additional practices (compared to Sullivan-Catlin’s research) aimed at lessening the impact of divergent motivational priorities between cohousing residents: managed flexibility in case of obligatory chores; and an inclusive decision-making process;
revealed that the higher levels of interaction and participation (compared to mainstream settings) have a positive effect on the cohesiveness of communities (through the development of trust/reciprocity/bonds). At the same time, cohousing tries to balance personal and group interests (through flexibility; inclusivity; conditions for participation, or when selling and leaving the community). As such, the findings conform to different interpretations of social capital theory: the generalised one of Putnam (1993; 1995; 2001); or the one of DeFilippis (2001), which also takes into account the relation between personal and group interests.

In terms of the development process, the findings from this study:

- confirmed through a cross-sectional analysis of North-West European communities the overarching views of the literature regarding the important, yet challenging nature of the participatory development process;

- discussed in detail, using a cross-sectional approach, the implications of the various development models (as classified by Williams, 2008) on the success of cohousing. They emphasized: the negative effects of the ‘top-down’ approach on the formation of a united group; and the positive (financial and technical support; allowing the group to focus more on community-building and less on project management) and negative (constraints set by the developer upon the cohousing group in return for the offered support) implications of a partnership approach. The development of a long-term collaboration is seen as an important practice for safeguarding the community, especially if the developer becomes the de-facto landlord of the community;

- pointed out some benefits for developers/authorities supporting cohousing, from the point of view of interviewees (cohousing residents).

In terms of the physical design, the findings from this study used an analysis of both ‘single-’ and ‘multi-building’ communities, and:
highlighted some similar design solutions as the ones mentioned by the cohousing literature- pedestrian pathways and off-site parking, location and visibility of common house/common areas, and orientation of private buildings (for enhancing interactions); and having buffer zones for enhancing privacy;

- revealed some additional design solutions from the ones mentioned in the literature- clustering some common household functions (e.g. mailboxes; laundry etc.) by the common house (in ‘multi-building’ communities) or by the entrance to the building (in ‘single-building’ communities); using glazed walls in order to enhance the visibility of communal spaces in ‘single-building’ communities; and, where possible, providing secondary accesses to private houses, reachable from outside the community. The former two measures are aimed at enhancing casual social interactions; and the latter at enhancing privacy in cohousing. If changes to the interior of the building are not possible (glazed walls in order to enhance the visual access), then alternative solutions for signalling the presence of people in common areas are recommended (e.g. flashing lights on the corridor; smartphone applications);

- highlighted the difficulties when designing a site for two ‘inherently’ opposing aims- enhancing the sense of community; while also allowing for privacy;

- represent additional evidence for the field of environment-behaviour; highlighting the influence of the built environment on human behaviour in cohousing;

In terms of environmental sustainability, the findings from this study:

- confirmed through a qualitative, cross-sectional approach the overarching view of the literature that cohousing can be more environmentally sustainable than mainstream settings (due to four key themes);

- added two more categories- better waste management and more efficient use of the site- to the list of potential advantages of cohousing in terms of environmental sustainability;
- support the view that environmental sustainability can be positively influenced by a high level of social capital; highlighting the easier dissemination of environmental ideas and practices due to higher levels of interaction/participation among cohousing neighbours (compared to mainstream settings).

The above arguments summarize the contributions of this study to the academic knowledgebase on cohousing. In addition, the scope of the research itself, which implies bringing together in a single study theories and findings from different ‘spheres’ (motivation/design/sustainability), can be seen as a novelty in terms of cohousing research. The next section will discuss some practical implications of this study as well.

b) Practical and Policy Implications

Although not part of this Thesis, a second research objective of this study was to explore how the findings from North-West European cohousing could be applied to the context of Bron Afon Community Housing and Wales. The complexity of the objective means that further investigations beyond the means of this study are required. However, exploratory workshops and presentations with Bron Afon staff and tenants, as well as written reports regarding the housing context in Torfaen (a Welsh borough) have been conducted. It is hoped that through them and through the findings from this Thesis, Bron Afon’s interest will be further engaged. This could mean that they support the development of a pilot cohousing project in Wales (Torfaen) in the future; and/or future research/reports on cohousing.

Furthermore, the Welsh government is looking for alternative housing solutions (WAG, 2010). Its focus is currently centred on new models of home ownership, particularly on the co-operative housing model; which is being empirically tested through the promotion of eight pioneer projects in Wales. In addition to this, the Welsh government is also looking to provide a number of shared accommodation units in the future. It is hoped that these initiatives, combined with the insights from this study (and future studies on cohousing that can be related to Wales/UK), can help raise awareness on cohousing in Wales.
This study could have practical implications beyond Bron Afon or Wales, for the development of cohousing in general. One of the lessons from North-West European cohousing is that unlike most other forms of intentional communities, it seeks to have a balance between community and private lives. Therefore, in comparison with ecovillages or communes (for example), the model is generally less ‘ideological’ and would cater more for ‘mainstream’ people. Hopefully this can help shift some of the preconceived ideas surrounding cohousing, especially from the part of local authorities and planning agencies.

In addition, the findings revealed: a higher social capital in the studied communities (compared to mainstream settings); higher potential for environmental sustainability; and a number of possible socio-economic benefits for developers/authorities supporting cohousing. It is hoped that these considerations will also contribute to more interest and support for cohousing in the future.

10.4 Limitations of the study and recommendations for future research

This study has determined some key factors affecting the long-term success of cohousing communities via means of in-depth interviews with cohousing residents (supported by visual analysis and participant observation) across four North-West European countries. As a consequence of this research design, there are a number of limitations that need to be considered. The recommendations for future research are based on these limitations, and on the topics for which data from this study was inconclusive.

First, this is a qualitative study, and the main body of data from this study is comprised of the opinions of cohousing residents. The research design was chosen in order to best achieve the main aim of the study (and to help address some of the gaps in the knowledgebase), considering the time, financial and practical restrictions of this research. However, there are two topics from this Thesis which would benefit from different type of data as well: in terms of environmental sustainability, quantitative measurements would enhance the accounts of the interviewees; whereas in terms of the potential benefits of cohousing for local authorities and developers, research from the perspective of the latter two is necessary. Therefore, the
first recommendations for future research on cohousing are to tackle these two considerations.

Second, the resources of this study did not allow for more than a preliminary examination of the practical possibilities for developing cohousing in the context of Bron Afon and Wales. Therefore, this study recommends future research that deals with the shaping of the housing policy in Wales and how this impacts the development of cohousing. Additional research on Bron Afon, including a feasibility study for cohousing development in their context, is also advised.

Third, future research on the topics for which the data of this study was inconclusive is recommended. The literature considers that private units in cohousing are generally smaller than the respective average mainstream housing units; however this study could not confirm this. Therefore, future research focused on this issue is recommended.

Future research on ‘commitment mechanisms’ in cohousing is also advised; as the data from this study could not confirm all of Sullivan-Catlin’s findings. Additionally, future research focused on the ideal size of cohousing communities; and especially on the effects of the various decision-making systems is advised. For both these aspects data from this study was inconclusive.

Fourth, research regarding the cultural, institutional and historic differences among cohousing in different countries would be recommended. The data did not showcase any important differences between the four studied countries, besides the ones discussed earlier in this chapter. However, data in this regard was limited to the accounts of cohousing residents and to secondary research. A more holistic view on the matter is required in order to have a better picture of the differences between cohousing communities in different countries.
10.5 Summing up

The main aim of this PhD Thesis has been to determine important factors that affect the long-term success of North-West European cohousing. Theories related to the impact of the built environment on human behaviour (environment-behaviour theory; social space theory), or to the positive consequences of interactions and participation on the social cohesion of neighbourhoods (social capital theory), have been used as a frame of reference for this study. Preliminary research and a critical review of the literature highlighted some key ‘grand’ categories of factors influencing the long-term success of cohousing.

Following the preliminary research, in-depth interviews with 46 cohousing residents from 16 different cohousing communities across four North-West European countries (Sweden, Denmark, the Netherlands and the UK) were undertaken; and represent the main body of data for this study. Desk research, visual analysis and participant observation supplemented the accounts of interviewees.

Eight research questions, tackling four major aspects of cohousing (motivation, development process, physical design, and environmental sustainability) were developed in order to deal with the main aim of this Thesis. The findings reveal 16 important factors (belonging to all of the four aforementioned aspects of cohousing) that influence the long-term success of cohousing.

10.6 Ending statement

Cohousing has been one of the fastest growing types of intentional community in the past few years (UK Cohousing Network, 2013; Jarvis, 2015). Its commitment for balancing the social and private spheres differentiates cohousing from other types of communal arrangements; thus recommending it as an attractive alternative for ‘mainstream’ people. Nonetheless, besides the advantages offered by the environment, this study also highlighted the level of commitment required for making cohousing work. As some interviewees remarked, cohousing is not for everyone. Therefore, it is difficult to know at this time whether
cohousing will truly become a mainstream housing option, or will remain a niche in the housing market.

Regardless of this, lessons from cohousing can still be very useful for larger, less ‘intense’ developments in the future (such as sustainable neighbourhoods). Elements that are characteristic to cohousing, such as the participatory process before moving in, the purposeful design aimed at fostering casual interactions, the common facilities and self-management; all can be useful in some form or another if applied in a more sustainable development of urban and rural settlements.
11) References

a) Articles and Books cited in the Thesis


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**b) Additional bibliography**


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# Annexes

### Annex I: Description of the studied communities

## Denmark

<table>
<thead>
<tr>
<th>Foundation</th>
<th>BF Absalon's Have</th>
<th>BF Bakken</th>
<th>BF Graemaraken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Roskilde (small city)- New build (multiple buildings)</td>
<td>Humlebaek (small town)/ new build (multiple buildings)</td>
<td>Borup (small town)/ New build (multiple buildings)</td>
</tr>
<tr>
<td>Population</td>
<td>23 houses/around 100 people (half of which children)</td>
<td>25 houses/ Around 90 people</td>
<td>25 dwellings/ Around 100 people (over half of which are children)</td>
</tr>
<tr>
<td>Ownership Type</td>
<td>Owned</td>
<td>Mixed: mostly owned; except for two apartments in one dwelling (in the farmhouse)</td>
<td>Owned (except for one house which is rented, as owners moved away)</td>
</tr>
<tr>
<td>Social rents</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Shared facilities</td>
<td>Kitchen and dining room; Children’s Playroom; Living room; Green Areas; Chickens; Carpooling for several of surrounding communities; Outdoor playing areas for children</td>
<td>Common kitchen and dining room; sauna; common laundry; music room; playroom for children/yoga room; another children’s playroom with TV and area for teenager to play videogames; outdoor playground; sheep and horses; Carpooling</td>
<td>Common kitchen and dining room; two playrooms for children; Hobby room; (most probably) workshop/exercising room; Green Areas; Living room</td>
</tr>
<tr>
<td>Group activities</td>
<td>Community Anniversary; Adult party once per year; Christmas event; Workdays twice per year; Summer party; New Year’s party; Parties for children; spontaneous bonfire events</td>
<td>Working weekends; two Christmas events; midsummer party (summer solstice); New Year’s Eve party; yearly fieldtrip weekend; biannual open day event; Yoga; Running</td>
<td>Yearly sports day; Yearly flea market; Christmas Event; Easter event; two adult parties per year; Yearly bonfire night; Quiz night (three or four times per year); Yearly summer trip</td>
</tr>
<tr>
<td>Common meals</td>
<td>Four times per week (cooking every fifth week; not compulsory, but everyone takes part to a certain extent; one of the cooking groups is part-time)</td>
<td>Five times per week (cooking every fifth week)</td>
<td>Three times per week (cooking every sixth week); not compulsory</td>
</tr>
<tr>
<td>Obligations for members</td>
<td>Cleaning (cooking only for those eating, basically everyone in this community)</td>
<td>Cooking; Cleaning/ alternating with events planning; adults have to do four days of working per year, children two</td>
<td>Be part of a working group (not necessarily cooking)</td>
</tr>
<tr>
<td>Financial Contribution</td>
<td>Monthly fee (fixed)</td>
<td>Monthly fee- around 250 pounds per month per house (varies: depending on number of people in a house +depending on size of house + a fixed part)</td>
<td>Monthly fee: around 120 pounds per month (fixed)</td>
</tr>
<tr>
<td>Decision-making</td>
<td>Majority voting</td>
<td>Majority voting</td>
<td>Majority voting</td>
</tr>
<tr>
<td>Working groups</td>
<td>Gardening group; Cleaning group; Maintenance Group; Compost group; Chicken group; Rainwater collection group; Environmental Group; IT group</td>
<td>Maintenance group; Sheep group; Snow removal group; Sustainability Group</td>
<td>Maintenance group; Gardening group; Lawn group; Event Group</td>
</tr>
<tr>
<td>Sustainable technologies</td>
<td>Rainwater collection; Compost</td>
<td>No (but in the process of acquiring a geothermal system)</td>
<td>Solar panels on all houses (at its inauguration, it was the biggest non-funded solar project of private households in the Nordics)</td>
</tr>
</tbody>
</table>
### Denmark

<table>
<thead>
<tr>
<th>BF Kaephoj</th>
<th>BF Lange Eng</th>
<th>KH Tullstugan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foundation</strong></td>
<td>1986</td>
<td>2008</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Roskilde (small city)/ New build (multiple buildings)</td>
<td>Albertslund (town)/ New build (multiple buildings)</td>
</tr>
<tr>
<td><strong>Total Area</strong></td>
<td>21 houses/ 36 people (out of which 3 children; initially 65 people, but almost all the children have left)</td>
<td>54 houses/ Around 200 people (100 of which are children)</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td>Owned (two or three houses are rented because owners are abroad for a period)</td>
<td>Owned (It was rented for the first 10 years)</td>
</tr>
<tr>
<td><strong>Ownership Type</strong></td>
<td>Intermediate system between renting and owning (you own a share of the association)</td>
<td>Owned (two or three houses are rented because owners are abroad for a period)</td>
</tr>
<tr>
<td><strong>Social rents</strong></td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Shared facilities</strong></td>
<td>Small lounge at the entrance; common kitchen and dining room; workshop; hobby room; common laundry; living room; three children’s playrooms (based on age; now repurposed); Chicken; Green Area; Outdoor playground; Guest bedroom</td>
<td>Common Kitchen and Dining room; Cinema; Coffee Bar Area; Small Sports Room; Storage Room; Room for older kids; Central Green; Outdoor playgrounds; Swap room; Workshop; Chicken; Sauna</td>
</tr>
<tr>
<td><strong>Group activities</strong></td>
<td>Community Anniversary; December calendar opening tradition and subsequent visits to all private dwellings; Breakfast 24th December; Working Days 4-6 times per year; Danish Halloween-like celebration</td>
<td>Adult parties; Friday night cinema; Christmas event; Flea Market; Taboeira classes (for outsiders as well); Summer party; Halloween party; Two working weekends per year; Café nights; Events group; Yearly open day</td>
</tr>
<tr>
<td>Common meals</td>
<td>Seven times per week (three times every fourth week)</td>
<td>Six times per week (cooking three times every seventh week)</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>Obligations for members</td>
<td>Cooking; Taking part in working days</td>
<td>Cooking, Cleaning twice per year; and be part of another group of your own interest (in theory one hour per week should be dedicated to community purposes, doesn’t work that way)</td>
</tr>
<tr>
<td>Financial Contribution</td>
<td>Monthly fee</td>
<td>Monthly fee (mixed: size of house + how many people live in it)</td>
</tr>
<tr>
<td>Decision-making</td>
<td>Majority voting (striving for consensus)</td>
<td>Majority voting</td>
</tr>
<tr>
<td>Working groups</td>
<td>Gardening group; Chicken group; Dreaming group; Travelling group; Group with people going to theatre and cultural events</td>
<td>Cinema Group; Running group; Knitting group; Reading group; Chess and Domino group; Gardening group; Maintenance group; Communication group (showing outsiders around)</td>
</tr>
<tr>
<td>Sustainable technologies</td>
<td>No</td>
<td>No (although all the houses have very good insulation- A and B levels, which is apparently compulsory in DK for new builds)</td>
</tr>
</tbody>
</table>
### Sweden

<table>
<thead>
<tr>
<th></th>
<th>KH Tre Portar</th>
<th>KH Dunderbacken (senior)</th>
<th>KH Faerdknappen (senior)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foundation</strong></td>
<td>1986</td>
<td>2010</td>
<td>1993</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Stockholm (large city)/ Reconverted Apartment building (one building)</td>
<td>Stockholm (large city)/ New Build (one building)</td>
<td>Stockholm (big city)/New build (one building)</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td>52 flats/ 150 people (out of which 70 children)</td>
<td>61 flats/65 people (out of which 3 children)</td>
<td>43 flats/ 54 people (no children)</td>
</tr>
<tr>
<td><strong>Ownership Type</strong></td>
<td>Rent</td>
<td>Rent</td>
<td>Rent</td>
</tr>
<tr>
<td><strong>Social rents</strong></td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Shared facilities</strong></td>
<td>Kitchen and Dining Room; two children’s playrooms (for different ages); Workshop; Atelier with ceramics oven; Sport Room/Hobby Room; Guest Room; Garden; Living Room/ Room for socializing; Sauna; Common laundry for whole block</td>
<td>Kitchen and dining room; Two common laundry rooms; guest rooms; sauna; Room for exercising; Three workshops (one of which for carpentry); Garden; IT-corner.</td>
<td>common kitchen and dining room; Three guest rooms; gymnastic rooms; bike shed; library; attic lounge with fireplace; roof terrace; garden; sauna; common laundry; office; workshops (weaving room; woodwork); IT-corner; Individual and communal storage rooms in the basement; Food storage room</td>
</tr>
<tr>
<td><strong>Group activities</strong></td>
<td>Big parties a few times per year; Excursions in the surrounding areas; handcraft workshops; Open Day once per year; Cleaning day twice per year; Halloween and other events for children</td>
<td>Coffee every morning; Cleaning every seventh week; Christmas Eve meal; Big parties a few times per year; Movie nights</td>
<td>Cleaning every seventh week; Yearly open day; Christmas lunch; Day for children and grandchildren; New Year’s Eve; Gardening (four days per year: 2 weekends); Parties; Movie nights; Cultural evenings with outside people</td>
</tr>
<tr>
<td><strong>Common meals</strong></td>
<td>Four times per week (cooking once every four weeks)</td>
<td>Five times per week (cooking every sixth week; no cooking during summer and winter break)</td>
<td>Five times per week (cooking every sixth week; not during summer time)</td>
</tr>
<tr>
<td><strong>Obligations for members</strong></td>
<td>Cooking; Cleaning twice per year</td>
<td>Cooking and Cleaning; Cleaning hallway next to private apartments; Keeping garden to a certain standard</td>
<td>Cleaning, cooking; at night going around the common areas and closing the doors and windows, turning on the alarm</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Financial Contribution</strong></td>
<td>Membership Fee</td>
<td>From membership fee</td>
<td>Monthly fee (based on size of apartments; around 10 pound per person per month)</td>
</tr>
<tr>
<td><strong>Decision-making</strong></td>
<td>Majority voting</td>
<td>Majority voting</td>
<td>Majority voting</td>
</tr>
<tr>
<td><strong>Working groups</strong></td>
<td>Dining room group; Recipe Group; Compost group; Cleaning group; Gardening group</td>
<td>Group who receives visitors; Gardening group; Menu group (Recipe group); Food buying group (for common meals); Economy group (for finances); Group who interviews people; Marketing group; Maintenance group; Cleaning group; Conference group (Event planning group); Advice-Giving group (deals with issues that might arise between members); Cultural group, Sewing group, Film group, Interior decorations group; Group that deals with visitors; Piggy Bank group (saving money).</td>
<td>Gardening group; Library group; IT group; Event group; Chorus</td>
</tr>
<tr>
<td><strong>Sustainable technologies</strong></td>
<td>No</td>
<td>Compost</td>
<td>Bee Hives</td>
</tr>
</tbody>
</table>
## Netherlands

<table>
<thead>
<tr>
<th></th>
<th>CW Hestia</th>
<th>CW Het Kvarfeel (senior)</th>
<th>CW Leeuwarden</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foundation</strong></td>
<td>1986</td>
<td>2003</td>
<td>1990</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Lelystad (small city)/ New build (multiple buildings)</td>
<td>Culemborg (small town)/ New build (one building)</td>
<td>Leeuwarden (city)/ Converted Office Building (one building)</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td>32 households/ 39 people</td>
<td>24 households/ 37 people</td>
<td>11 flats/ 12 people (no children)</td>
</tr>
<tr>
<td><strong>Ownership Type</strong></td>
<td>Mixed: 27 households owned; 5 rented</td>
<td>Owned</td>
<td>Rent</td>
</tr>
<tr>
<td><strong>Social rents</strong></td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Shared facilities</strong></td>
<td>Common garden; Common Kitchen and Dining room; Exercise Room; Common Laundry; Meeting Room; Hobby Room; Children’s Playground; Children’s Room</td>
<td>Common Garden; Common Kitchen and Dining Room; Car Pooling; Bike Storage; Guest Room; Meeting Room; Common Laundry; Library</td>
<td>Common flat with common kitchen, dining room, and living room; terrace space on the roof; 2 guest bedrooms; Storage room in the basement</td>
</tr>
<tr>
<td><strong>Group activities</strong></td>
<td>Singing; Playing cards; Yoga; Soup night; Gardening (twice per year)</td>
<td>Meal for 10 people (once a month); Christmas Event; Summer Nights Event; Coffee (4 times per week); Music; Tennis; Bridge; Reading; Movies; Slide Presentations (from abroad trips); Eating (once per month, max. 10 people)</td>
<td>Yearly Party; Maintenance Day twice per year; Christmas event (sometimes)</td>
</tr>
<tr>
<td><strong>Common meals</strong></td>
<td>No community-wide common meals</td>
<td>No community-wide common meals</td>
<td>Two times per week (cooking every six weeks)</td>
</tr>
<tr>
<td><strong>Obligations for members</strong></td>
<td>Once per year to prepare soup; Cleaning of common house and garden</td>
<td></td>
<td>No formal obligations except for cleaning the storage room in the cellar upon leaving (unwritten rules apply though: cooking every six weeks; cleaning common room every two months)</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------</td>
<td>---</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Financial Contribution</strong></td>
<td>Income-related</td>
<td>Monthly Fee</td>
<td>Fixed Charge (divided equally between members)</td>
</tr>
<tr>
<td><strong>Decision-making</strong></td>
<td>Majority voting (except for the acceptance of new members, where consensus is required)</td>
<td>Majority Voting (except for the acceptance of new members, where consensus is required)</td>
<td>Majority voting; except for accepting new members, where consensus is required</td>
</tr>
<tr>
<td><strong>Working groups</strong></td>
<td>Garden Group; Financial Group; Maintenance Group; Working group regarding activities with children; Group of first connections (Integrating new members)</td>
<td>Technical Group; Social Group (organizes events); Garden Group; Bar Group; Judicial Group (regarding rules); Eating Group</td>
<td>Board; Group that organizes yearly party; Group that promotes the community; Committee that interviews applicants; Committee that looks at the possibility of renting guest bedrooms as B&amp;B</td>
</tr>
<tr>
<td><strong>Sustainable technologies</strong></td>
<td>Solar Panels on some dwellings</td>
<td>Solar Thermal Panels; Grey water Harvesting System; Geothermal Heating; Biogas system that uses black water</td>
<td>One solar panel delivering energy to the common flat (personal initiative); Green Roof</td>
</tr>
<tr>
<td><strong>Netherlands</strong></td>
<td><strong>UK</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>CW Romolenpolder</strong></td>
<td><strong>Lancaster Cohousing</strong></td>
<td><strong>Springhill Cohousing</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Foundation</strong></td>
<td>1992</td>
<td>2012</td>
<td>2003</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Haarlem (city)/ New Build (one building)</td>
<td>Lancaster (town)/ New build (multiple buildings)</td>
<td>Stroud (town)/ New build (multiple buildings)</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td>46 flats/ 65 people (out of which 14 children; 45% of the original residents from 1992 still live in the community)</td>
<td>35 houses/ About 70 people</td>
<td>35 houses/About 75-80 people</td>
</tr>
<tr>
<td><strong>Ownership Type</strong></td>
<td>Rent</td>
<td>Owned</td>
<td>Mixed (studios and flats are for rent; all the bigger sizes are owned)</td>
</tr>
<tr>
<td><strong>Social rents</strong></td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Shared facilities</strong></td>
<td>Common kitchen, dining room, living room; bike storage; common central garden; children’s playroom; common laundry; Guest flat; Swap room</td>
<td>Common Kitchen and dining room; Children’s Playroom; Food storage Room; Common Laundry; 2 Guest rooms; Outdoor terrace; Orchard; Business space for rent (workshops/offices/studios); Carpooling; Hot desk space; Meeting room; Swap room</td>
<td>Common kitchen and dining room; Common Green with pond; Vegetable garden; Chickens; Outdoor children’s play area; Bike shed (planned); Workshop; Hobby room; Multi-purpose room (meditation, meetings, music etc.); Common laundry</td>
</tr>
<tr>
<td><strong>Group activities</strong></td>
<td>Coffee every Sunday morning; Gardening Days; Maintenance day twice per year; Eating once a month (about 10 people); Reading</td>
<td>Cooking classes; Nutrition lists; Craft Classes; Meditation; Pilates/ Alexander Technique; Running (every day) and mountain running (once per week);</td>
<td>Yoga; Meditation; Choir; Christmas event; Open day; circle dancing, children’s art and craft classes; bridge; quiz evenings; Working days twice per month</td>
</tr>
<tr>
<td><strong>Common meals</strong></td>
<td>No community-wide common meals</td>
<td>Six times per week (although not implemented thoroughly)</td>
<td>Three times per week (+ another one, once a month, on Saturday; cooking once every month)</td>
</tr>
<tr>
<td>Obligations for members</td>
<td>Take part in cleaning or gardening days</td>
<td>?</td>
<td>Cooking plus 20 hours per year for community purposes (half should be as part of a working day)</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------------------------------</td>
<td>---</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Financial Contribution</td>
<td>Extra charge from rent (15 Euros per month per property)</td>
<td>Service charge (per member per household)</td>
<td>Service charge (varies depending on the size of the house; from 10 - 20pounds per month a studio to 60-65 pounds for a 4-bedroom house)</td>
</tr>
<tr>
<td>Decision-making</td>
<td>Majority voting</td>
<td>Consensus</td>
<td>Consensus</td>
</tr>
<tr>
<td>Working groups</td>
<td>Gardening Group; Event group; Eating group; Group that deals with prospective members; Maintenance Group; Administration Group (financial);</td>
<td>Meditation group; Book group; Craft group; Running group; Mountain running group; NVC group; Empathy group; Common house working group;</td>
<td>Garden group; Maintenance group; Pet Committee; Group responsible for the decoration of the middle floor of the common house; Secret garden group; Listening group (sharing); Music group; Textiles and dyeing group; Disputes Committee</td>
</tr>
<tr>
<td>Sustainable technologies</td>
<td>No</td>
<td>Buildings are built on Passivhouse standard; District heating; Plans for getting electricity from hydro-electric scheme and solar panels</td>
<td>Solar panels; Compost; Alternative drainage system (SUDS); Very good insulation(they got an UK sustainability award in 2006)</td>
</tr>
<tr>
<td><strong>UK</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Threshold Cohousing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Foundation</strong></td>
<td>2004</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Gillingham in Dorset (town)/ Retrofit (Multiple buildings)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td>14 houses/ 21 people</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ownership Type</strong></td>
<td>Mixed: 3 people (out of 20) rent a room in the farmhouse + a few rent their houses</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Social rents</strong></td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Shared facilities</strong></td>
<td>Common kitchen and dining room; Office room; Living room/Library; Central Green; vegetable gardens; polytunnel; Chicken; Workshop; Common Laundry; Meditation room</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Group activities</strong></td>
<td>Sharing once a month; Gardening weekends; Cohousing courses (for outsiders)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Common meals</strong></td>
<td>Twice per week</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Obligations for members</strong></td>
<td>Four hours per week for community purposes; plus running courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Financial Contribution</strong></td>
<td>Service charge (the costs of the communal house are mostly covered by money from courses)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Decision-making</strong></td>
<td>Consensus</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Working groups</strong></td>
<td>Chicken group; Finance group</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sustainable technologies</strong></td>
<td>Biomass boiler, CHP plant; solar panels; poly tunnel; bio digester, rainwater collection</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Annex II: Interview guide

A. Background of interviewee

1. How did you hear about cohousing?

2. Did you have any other experiences of communal (more than nuclear family) living prior to cohousing?

3. What was the community/neighbourhood in which you grew up like? (Have you felt the same sense of community that you seek in cohousing in these settings?)

B. Architecture, Design and Size

4. How well does the design of the community encourage social interaction?

5. Are there any improvements/enhancements you would like to see for your private dwelling?

C. Common facilities and activities

6. Are there any additional services/ facilities/ resources that you would like to have in your cohousing group?

7. Are you happy with the frequency of common activities in your cohousing group (shared meals, group events etc.)?

D. Sustainability/ Durability

8. Do you consider that a cohousing environment enhances the opportunities for a more sustainable lifestyle than elsewhere? Why?

9. How would you describe the turnover rate of the cohousing group (high/ low/ about right)? Why?
E. Motivation

10. What attracted you most about the idea of cohousing?

11. If applicable: Do your children like living here? Why?

F. Ideology

12. Literature usually mentions the lack of a formal ideology in cohousing groups. Do you think that there actually are some common values and beliefs that people seem to have, as members of your cohousing group?

13. If applicable: to what extents has the ideology changed over time and why?

G. Relations to the wider community

14. Did you experience any hostility or discrimination against you because you are living in what some may see as an ‘alternative’ housing setting?

H. Decision-making and Development process

15. Do you think that the decision-making process in your cohousing group is efficient?

16. Do you think that all voices are heard equally in your cohousing group?

17. How important do you think the Participatory Development Process is for the development of your cohousing group?

18. How well did members arriving after the development phase integrate?
I. Economy and Sharing

19. For which activities/ facilities are you pooling resources in your cohousing group? Are you happy with these arrangements?

20. Do you consider cohousing to be an affordable option (regarding development and building costs, and daily expenditures)?

J. Everyday Management

21. Do you feel you are getting enough privacy in your cohousing group?

22. What is your opinion about the efficiency of the ‘working committees’ for everyday life in your group? Any recommendations?

23. How does your cohousing group deal with members who are not contributing?

K. Potential and limitations of the cohousing concept

24. What do you like about living in a cohousing scheme? Would you recommend it to others?

25. What do you dislike or have reservation about, in your cohousing group?

26. Given your personal experience, do you think that the current living setting enhances the development of bonds between residents?

27. What are your views/feelings about cohousing as a substitute for the nuclear family?

28. Do you regard your current housing setting as ‘transitional’, or do you see yourself spending an undetermined amount of time in this setting?
Annex III: Short Questionnaire handed prior to interviews

I) Background of interviewee/ Personal information:

Name: __________________________________________________________

<table>
<thead>
<tr>
<th>Sex (circle one):</th>
<th>F</th>
<th>M</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Age (check one):</th>
<th>8-24 years old</th>
<th>45-54 years old</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-34 years old</td>
<td>55-64 years old</td>
<td></td>
</tr>
<tr>
<td>35-44 years old</td>
<td>65-74 years old</td>
<td></td>
</tr>
<tr>
<td>75 years or older</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current marital status (check one):</th>
<th>Single</th>
<th>Widowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>Divorced</td>
<td></td>
</tr>
<tr>
<td>Separated</td>
<td>Partnered</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>People currently living in your household (check one)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of children at home (check one):</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

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Ethnicity origin/ Race (check one):

☐ White/ Caucasian
☐ Black/ African
☐ Asian
☐ Other (please specify) ____________________

Current religious affiliation, if any (please specify): ______________________________

Highest level of education completed (check one):

☐ Grammar school
☐ High school or equivalent
☐ Vocational/technical school (2 year)
☐ Some college
☐ Bachelor's degree
☐ Master's degree
☐ Doctoral degree
☐ Professional degree (MD, JD, etc.)

Your household’s yearly income in €/£ (check one):

☐ < 10,000
☐ 10,000 - 19,999
☐ 20,000 - 29,999
☐ 30,000 - 39,999
☐ 40,000 - 49,999
☐ 50,000 - 74,999
☐ 75,000 - 99,999
☐ 100,000 - 150,000
☐ > 150,000

Occupation (please specify): _________________________________________________

Can you please mention your prior location before moving into a cohousing community (check one):

☐ Rural
☐ Small Town
☐ Suburban
☐ Urban
II) Cohousing experience

‘Architecture, Design and Size’ category:

How would you rate the following spaces of your private household? (check as appropriate)

<table>
<thead>
<tr>
<th>Space</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Too small</td>
</tr>
<tr>
<td><strong>Living Room</strong></td>
<td></td>
</tr>
<tr>
<td><img src="#" alt="Living Room Diagram" /></td>
<td></td>
</tr>
<tr>
<td><strong>Bedroom(s)</strong></td>
<td></td>
</tr>
<tr>
<td><img src="#" alt="Bedroom Diagram" /></td>
<td></td>
</tr>
</tbody>
</table>
Bathroom

Kitchen

Entrance hall
‘Common facilities and activities’ category:
*Can you please mention the extent of participation for members in your household to the following community activities (check as appropriate)*

<table>
<thead>
<tr>
<th>Event</th>
<th>Extent of Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Common meals</td>
<td></td>
</tr>
<tr>
<td>Voluntary workdays</td>
<td></td>
</tr>
<tr>
<td>Formal meetings</td>
<td></td>
</tr>
<tr>
<td>Community social events</td>
<td></td>
</tr>
<tr>
<td>Events with ‘outsiders’</td>
<td></td>
</tr>
</tbody>
</table>
What are the shared spaces/facilities the members of your household use most often? (please specify the following in descending order, from most used to least used)

- **Exercise room or similar:**

- **Hobby room or similar:**

- **Common Laundry:**

- **Common outdoor spaces:**

- **Guest room:**

- **Meeting room:**

- **Common kitchen and dining room:**

- **Other (please specify)**
How often do you participate in common meals? (check one)

☐ Never  ☐ Weekly
☐ Less frequent than once a month  ☐ Two times per week
☐ Once a month  ☐ More often than 2 times per week
☐ Once every two weeks

‘Motivation’ category:

Did any of the following reasons (specified in the relevant literature) influence your decision for living in a cohousing community? (check as appropriate):

The need for:

☐ Life in a supportive, community-oriented environment; and emotional support;
☐ A secure and improved environment for adults and children alike;
☐ ‘Sharing the load’ through support networks (e.g. child-care sharing, common meals, formal and informal support, practical);
☐ Self-fulfilment (e.g. freedom of self-expression; opportunities to ‘grow’ through communal life-style and the consensus decision-making process);
☐ Living in a sustainable environment;
☐ Material considerations (e.g. access to a better home; better facilities, pooling of resources, economy of scale);
☐ (If applicable) A solution to the limitations experienced in previous communal settings.
**Ideology category:**

What type of dietary regime are you/members of your household following? (check one)

- [x] No regime
- [ ] Vegan (no animal products or by-products)
- [ ] Vegetarian (No animal products)
- [ ] Other (please specify) ______________________

**‘Relations to the wider community’ category:**

Are you a part of any organisations beyond the cohousing group? (check as appropriate)

- [x] Local school
- [x] Clubs
- [ ] Local community groups
- [ ] Other (please specify) ______________________
- [ ] Social change groups

**‘Everyday management category:**

On an average day, how often do you engage in discussions/activities (other than polite greetings) with your neighbours? (check one)

- [x] Not at all
- [ ] Two times
- [ ] Once
- [ ] More than two times a day
- [ ] Other (e.g. once every two days; please specify) ______________________
Annex IV: Ethical approval

Monday, 06 January 2014

Cojau, Horatiu-Cristian
MPhil/PhD
Cardiff School of Health Sciences
Llandaff Campus
Cardiff CF5 2YB

Dear Applicant

Re: Application for Ethical Approval: Innovative housing models for a sustainable future

Ethics Committee Application Reference Number: 5775

Your ethics application, as shown above, was considered by the School Research Ethics Committee on 1/2/2014.

I am pleased to inform you that your application for ethical approval was APPROVED, subject to the conditions listed below – please read carefully.

Conditions of Approval

Your Ethics Application has been given a reference number as above. This MUST be quoted on all documentation relating to the project (e.g. consent forms), together with the full project title.

A full Risk Assessment must be undertaken for this proposal, as appropriate, and be made available to the Committee if requested.

Any changes in connection to the proposal as approved, must be referred to the Panel/Committee for consideration without delay. Changes to the proposed project may have ethical implications so must be approved.

Any untoward incident which occurs in connection with this proposal must be reported back to the Panel without delay.

This approval is valid for 12 months from the date of approval. Please set a reminder on your Outlook calendar or equivalent if you need to continue beyond this approval date. It is your responsibility to reapply / request extension if necessary.

Yours sincerely,

[Signature]

Professor Arthur Tatham
Chair of School Research Ethics Committee
Cardiff School of Health Sciences

Cc: Boswell, Cath

PLEASE RETAIN THIS LETTER FOR REFERENCE
PARTICIPANT CONSENT FORM

Reference Number:  
Participant name:  
Title of Project: Innovative housing models for a sustainable future  
Name of Researcher: Horatiu-Cristian Cojan

Participant to complete this section: Please initial each box.

1) I agree to take part in the above study

2) I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily

3) I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason

4) I agree to the interview being audio recorded

5) I agree to the use of anonymised quotes in the Thesis or in academic publications

____________________________________  ___________________
Signature of Participant  
Date

____________________________________  ___________________
Name of person taking consent  
Date

____________________________________
Signature of person taking consent

* When completed, 1 copy for participant & 1 copy for researcher site file  
Participant Information Sheet
Annex V: Cohousing in the bigger picture of intentional communities

The aim of this section is to give a brief overview of intentional communities; and highlight some key similarities and differences between cohousing and other generic types of intentional communities. It must be stated from the very beginning that this section has solely a tentative character. This is because of the difficulty of classifying intentional communities within strict boundaries. According to one North-American scholar with whom the author had a discussion on the topic, attempts to classify intentional communities in the academic sphere have been made (in the US) for some decades already. No definitive conclusions have been reached so far.

This is because trying to classify intentional communities is no simple undertaking, as they are “a complex and dynamic phenomenon” (Meijering, 2006, p.112). According to some, “the whole attempt to type communes was a mistake; there were as many types of commune as there were communes” (Abrams et al., 1976, p.25). A similar rationale has been mentioned in more recent studies as well (e.g. Sanguinetti, 2012). Given the diversity and particularities of intentional communities, their classification is neither rigid nor exclusive; and some communities could possess characteristics from more than one category (Sanguinetti, 2012).

Nonetheless, pointing out some key recurrent characteristics of different types of intentional communities can be helpful for giving the reader a broad overview of the position of cohousing in the bigger frame of intentional communities. As stated above, this only has a tentative character in this study; significant primary research is needed to determine clear boundaries and a more definitive classification of intentional communities, if possible at all.

a) The taxonomy of intentional communities

As the expression suggests, intentional communities differ from the wider society because of two key features: they are ‘intentional’, meaning that their inhabitants made a conscious choice for living together; and ‘communal’, meaning that they share certain goods and/or aspects of daily life (Kamau, 2002).
Despite the difficulties of classifying intentional communities (see previous page), various scholars have tried to categorize them based on different criteria, for research purposes:

- Considering the overarching aim of the community, some scholars (e.g. Kanter) distinguish between the ‘retreat’ (focused on withdrawing from society), ‘missionary’ (aiming at converting people to a specific ideology) and ‘domestic’ (sharing goods and aspects of daily life, without a strong ideology) types (Sullivan-Catlin, 1998).

- Considering the geographic location, suburban, urban or rural communities can be distinguished (ibid.).

- Considering their accomplishments, some scholars distinguished between successful and unsuccessful communities. Since success represents a subjective and mostly individual experience in the case of intentional communities, some authors decided to look at the continuity of the communities, and label the ones that endured over a certain period of time as successful (Shenker, 1986). However, this criterion has been heavily contested over time, and as a result the classification of intentional communities based on their accomplishments has been laid to rest by modern researchers (Sullivan-Catlin, 1998);

- Considering their overarching ideology, some scholars (like Kanter or Zablocki), distinguish between religious and secular communities (Zablocki, 1980; Sullivan-Catlin, 1998);

- Considering their stated purpose, Rigby distinguishes between six types of intentional communities: ‘self-actualising communes’, focused on providing the necessary conditions for the self-development of individuals; ‘communes for mutual support’, aimed at creating an ‘extended family’ environment; ‘activist communes’, aimed at exercising social changes in the wider community; ‘practical communes’, with the main scope of deriving economic and material advantages from a communal lifestyle; therapeutic communes, aimed at creating a beneficial environment for the people with specific psychical and physical needs; and ‘religious communes’, created for providing an environment in which people can exercise their spiritual beliefs (Rigby, 1974; Abrams et al., 1976).
In an attempt of reducing the overlapping characteristics present in Rigby’s classification, Abrams et al. propose a revised taxonomy, distinguishing between quasi-, utopian, purposive, and family communes (Abrams et al., 1976). Nonetheless, it is the taxonomy developed by Meijering that presents the most interest to this study; as it has been developed relatively recently, and is based on empirical evidences (Meijering, 2006; Meijering et al., 2007; Sanguinetti, 2012).

This taxonomy resulted after a ‘cluster analysis’ of most intentional communities in North America, Europe and Oceania, which took into account ideology (religious, alternative, ecological), self-sufficiency, facilities, degree of withdrawal from mainstream society; as well as geographical, social and economic considerations (ibid.). Four generic types of intentional communities resulted: religious communities, ecological communities, communal communities, and practical communities (ibid.).

Meijering considers cohousing as a particular type of practical intentional community (Meijering, 2006; Meijering et al., 2007). However, this does not take into account the desire for an enhanced sense of community; mentioned by the literature as a key reason for the emergence of cohousing (see previous section). Furthermore, unlike cohousing, practical communities do not “have to include complete resident management, strong participation in the development process, or dining together” (Vestbro, 2010, p.22; Jeske, 1992).

Therefore, for the rest of this discussion, the cohousing model will be treated separately from the other generic intentional community types, in order to emphasize the resulting differences, similarities, and variations. Religious intentional communities, due to their significant differences with the secular types (Rigby, 1974; Abrams et al., 1976; Meijering, 2006), will not be part of this discussion.
b) Key characteristics of the secular generic types of intentional communities

‘Communal’ intentional communities

‘Communal’ intentional communities originate from the ‘hippy communes’ of the 60s and 70s; and are focused on the social and ‘interpersonal’ bonds between their members (Rigby, 1974; Abrams et al., 1976; Meijering, 2006; Meijering et al., 2007). They seek to represent a small-scale model to be followed by mainstream society (Meijering, 2006).

In a way, they can be “thought of, first and foremost, as attempts to institutionalise friendship on the basis of place-making” (Abrams et al., 1976, p.31). They can often be found in villages and rural areas, as their members attempt to create a lifestyle based on communality and sharing, contrary to their own experience of mainstream society (Meijering, 2006; Meijering et al., 2007). Shared facilities (such as a kitchen, dining room, laundry room etc.) are usually clustered in a common dwelling (ibid.), which symbolizes the commitment of the community (often agreed in a contract) towards a collective lifestyle (Abrams et al., 1976; Meijering, 2006).

Another important aspect is related to the importance given to the consensus decision-making process by ‘communal’ IC’s, as it represents a core feature of communal ideology, giving all participants a chance to express (and enforce) their opinions (Meijering, 2006). Furthermore, such communities are often engaged with the wider society also through the provision of courses on communal living (Meijering, 2006; Meijering et al., 2007). It is even more important given the fact that ‘communal’ IC’s represent the least stable generic intentional community type, as the high fluctuation of members in many cases suggests (ibid.). This is due to the difficulty of balancing a communal lifestyle with personal privacy, which led to frequent changes in the ideology of many such communities (Abrams et al., 1976; Meijering, 2006; Rhoades, 2008).

A common occurrence in the intentional communities of the 60s and 70s (Renfro-Sargent, 2002; Firth, 2010), income sharing is considered to be very limiting towards personal autonomy; however the few still practicing it consider it to be “a way that removes the oppression of ownership”, requiring honesty and trust from the ones involved (Firth, 2010, p.108).
Furthermore, many contemporary communal intentional communities borrowed from the earlier ‘Hippy’ communes the humanistic desire for inclusivity, regardless of social status and race (Rhoades, 2008); however practical everyday considerations of communal life meant that homogeneity and an overall lack of diversity are prevalent in the majority of secular intentional communities (ibid.). Additionally, an ‘anti-rationalist’ behaviour has been noted among members of ‘communal’ intentional communities, as many prefer to base their life decisions on feelings and inner guidance (ibid.).

**Ecological intentional communities**

Ecological intentional communities are also “rooted in the hippy communes of the 60s and 70s” (Meijering, 2006, p.75); and are aimed at guiding mainstream society towards “living in harmony with the environment” through their own example (ibid., p.112). The most common type of ecological community is represented by the ‘ecovillage’, which emerged as a result of “a broader environmental consciousness developing during the 1990s” (Ergas, 2010, p.33).

Ecological communities usually withdraw from mainstream society in rural areas in an attempt to practice their environmental-friendly and self-sufficiency ideals (Meijering, 2006; Meijering et al., 2007; Ergas, 2010). In order to do so, they require a relative significant amount of land (which is usually available only in rural areas, or at the very edges of urban settlements); on which they seek to grown their own organic food, raise animals, produce energy and use sustainable construction materials (Bundale, 2004; Meijering, 2006; Meijering et al., 2007; Ergas, 2010). Consequently, ecological communities comprise of the following defining characteristics: “human-scaled, full-featured, harmlessly integrated with nature, supportive of healthy human development and sustainable” (Meltzer, 2010, p.105).

They combine sustainable and communal lifestyles, albeit with an emphasis on the former (Vestbro, 2010); and try to realise their self-sufficiency aspirations through a reduction in their economic ties with the wider society, by limiting the use of consumer goods and paid labour outside of the community (Meijering, 2006; Meijering et al., 2007). Regarding the relation with the wider society, ecological IC’s try to make use only of the absolute necessities from outside, and “reject what they feasibly can” (Meijering, 2006, p.25; Meijering et al., 2007, p.43). Additionally, they are still part of mainstream society regarding
the use of public facilities, like banks, hospitals etc. (Meijering, 2006; Meijering et al., 2007; Ergas, 2010).

Running courses for outside people represents a frequent practice for raising money and for disseminating their ideals and practices (Meijering, 2006; Meijering et al., 2007; Ergas, 2010). Such communities are usually integrated in wider ecological social movements, through which they try to influence mainstream society (Meijering, 2006; Ergas, 2010); and display a special relationship with the Earth, celebrating ‘alternative’ rituals such as solstices (Meijering, 2006). Members of ecological communities are predominately families with children, who maintain their social contacts with ‘outside’ families and friends (Meijering, 2006; Meijering et al., 2007).

**Practical intentional communities**

Practical intentional communities are the most numerous of all four generic types (Meijering et al., 2007); and have mainly a utilitarian purpose: to make use of better living conditions through the sharing of facilities and goods (e.g house sharing, car-pooling, goods sharing etc.) (Meijering, 2006; Meijering et al., 2007; Vestbro, 2010).

No ideology is prevalent in practical communities; the main unifying aspect being the practical living advantages of life in a community (Meijering, 2006; Meijering et al., 2007). Various types of housing cooperatives, therapeutic communities such as the ‘Richmond Fellowship houses’ (liminal places for the reintegration of patients with different psychological ailments in the society); and ‘intentionally- created’ forms of student coops are considered practical intentional communities.

Most practical communities are located in suburban areas, are outward- oriented, and maintain close contacts with the wider society, as most members work outside of the community (Meijering, 2006). Given the high prices for land in urban settlements, many such communities concentrate a relative high number of people on a reduced land surface; however households are privately owned and people are financially independent (ibid.). Most residents of practical communities have an upper middle class background; while a prevalence of families with children has been observed (ibid.). Given the absence of a strong
ideology, usually practical communities are fairly stable, and make no attempts for withdrawing from mainstream society (Meijering et al., 2007).

Practical intentional communities differ from mainstream through the fact that residents live in a communal setting, strengthened by communal practices, democratic decision-making and collective responsibility for the common facilities (Meijering, 2006); however their closeness to mainstream norms means that balance between personal privacy and communal life represents a central issue influencing the durability of such communities (ibid.). This aspect is enforced by the lack of a common ideology (other than the utilitarian value of communal living), even though practical communities usually offer more private space compared to all other intentional community types (ibid.).

c) Cohousing in the bigger frame of intentional communities: similarities and differences to the other generic types

Following a cross-sectional review of the general characteristics, rationale for emergence and ideology for the generic types of intentional communities, some key differences and similarities between cohousing and the other types of intentional communities have emerged.

In terms of general characteristics:

- two important features are ‘unique’ to cohousing communities (not formally existent in any other type of intentional community): the participatory process, which implies the involvement of the core group of future residents in the development process; and the design for social interaction, aimed at fostering interaction (in order to enhance the sense of community) while also allowing the possibility for personal privacy;

- main features of cohousing that are also common for the majority of secular intentional communities are: lack of a formal hierarchy; use of democratic decision-making; compulsory maintenance activities related to the shared spaces; a prevalence of highly
educated members; no income sharing; and frequent networking with like-minded groups.

In terms of ideology:

- cohousing differs from the other generic types: both communal and ecological intentional communities emerged as a critique to mainstream society, and aim to become a model to be followed (focus on self-sufficiency and sustainability in case of ecological communities, and interpersonal relationships in case of ‘communal’ intentional communities). In contrast, the rationale for the emergence of practical intentional communities is purely utilitarian. Cohousing differs from all three in this regard, as its context for emergence is more than just practical (desire for an enhanced sense of community; desire to avoid the shortcomings of other communal arrangements via balancing the public and private sphere); while officially being ‘non-oppositional’ to mainstream norms and values;

Because of these considerations, it can be remarked that cohousing forms a distinctive category from all other intentional communities. It could be situated somewhere between practical and ‘communal’ intentional communities in terms of ‘intensity’ of communal life. This is because cohousing seeks more than just an advantageous shared housing setting for its members (by trying to establish a sense of community), as it is the case in practical communities; while at the same time seeking less ‘intensity’ than ‘communal’ intentional communities (by attempting to balance private and public life).

Cohousing could also be situated somewhere between practical and ecological intentional communities in terms of environmental ideology. This is because the literature mentions a prevalence of ‘light green’ ideology in cohousing (Fromm, 2000; Meltzer, 2000; Sargisson, 2012); which is more than the scope of practical communities in this regard, but less than the ‘dark green’ scope of ecological intentional communities (Choi, Paulsson, 2011; Sargisson, 2012; Sanguinetti, 2014).
However, it must once again be stated that these considerations only have a tentative character. They are aimed at helping the reader to get a first impression on the position of cohousing in the bigger picture of intentional communities. It is beyond the scope of this study to have a more comprehensive look on the topic; or to take part in a discussion regarding the validity of Meijering’s (and of previous) attempts at classifying intentional communities.