Self-organization in the urban environment: a planner's adaptation to cohousing

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Rijksuniversity of Groningen, Faculty of Spatial Science

university of groningen

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It is difficult to analyse a living thing;
the analysis is at best imperfect.
Jane Adamms, 1892

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Summary

Cohousing is a new way of housing, whereby a group of people builds or lives together. Collective private commissioning (CPC) represents the Dutch version of building together within cohousing. Since CPC is a new concept it can push planners and spatial planning to change. The aim of this research is to analyse the possible change that cohousing has on planning and the role of the planning official. The results provide planning officials at the level of the municipality an understanding of the difference between cohousing and housing. It also provides suggestions for the planner to adapt to cohousing. Analysis is done based upon the concept of self-organization. This concept can be understood as a process wherein new structures or patterns emerge through interaction between elements within a system, despite the absence of outside coordination.

Three cohousing cases are analysed to distil the current role of local planners therein. Based on self-organization the cases are compared with each other but also with current spatial policy. This led to a distinction between government-stimulated cohousing (Wijngaarden, Zwolle) and privately induced cohousing (Almere). The role of planners shifted in the cases towards a larger focus on facilitation, communication and participation. Finance, marketing and relation management being new tasks in the portfolio of the planner. In cohousing the amount of building prescriptions is smaller than in normal housing projects, giving more freedom to citizens. Also more process related rules than normal are visible. A shift from content to process based planning is visible. It is argued that conceptualising cohousing and CPC with self-organization gives a tool to compare cases. This gives vital information for good spatial policy and feasible goals concerning CPC in the Netherlands.

Preface

We are back were we once where. Building ourselves. This time with guidance and council of municipalities, constructors and architects, and alone or in groups. Building as social phenomenon is interesting. In it underlying deep trends back and forth between individualism and group-oriented thinking, between building yourself and just buying a house are visible. These trends point to undercurrents in our culture with which planners have to deal.

Coming from water management the case of self-organization and cohousing was a new venture in my professional life. And although I am turning back towards 'water' rather quick it was a period with a lot of new insights, new people and new themes. It enlarged my vision on the world and in some respect it is not that different from other themes in spatial planning. Planning is more and more an holistic exercise wherein all aspects of our social life and physical environment are seen as one complex system. Houses are thereby often the centre of the individual life, protecting and embracing us. It is the place where one can be himself. Thus the house is one of the most important aspects of our life, a notion underlying the concept of cohousing. This thesis gives insight for municipalities to shape the individual wishes concerning housing, especially when groups are involved. I hope it thus can be a little building block in understanding and anticipating on the undercurrents wherewith planning has to deal.

This thesis and its content was conducted within a cohousing group set up by Ward Rauws. Although the group didn't make it to the real end, I want to thank Ward and the other members for the discussions, the insights and the time we had.

In the time of writing this thesis my marriage formed the other large part of my life. I thus also want to thank Ruth, as former fiancée and now my wife, for her support and the load of work she did if I again was busy writing. I also want to thank Stefan Hartman for his effort to take over the supervision whereby he was critical about both content and my planning. Last but not least I want to thank my friends and family who, again, didn't see me much due to busyness in this period. Marrying, thesis writing and soliciting did this time effectively the job of filling the time in my agenda. Thus thanks for the patience, critical questions and overall support in finalizing my master in just one year.

Meppel
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Mark Zandvoort

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1 Introduction

Building a house together. That is the theme of this thesis. The concept of cohousing is the central notion. Special attention is put on the role of the planning official and effects of cohousing on local spatial policy in the Netherlands. In this introduction the background and motivation for this thesis are given; shedding light on cohousing, its relation with planning and the problems that arise out of this rather new phenomenon. Also the theory wherewith cohousing is studied is shortly justified. This theory is used to give meaning to the empirical phenomenon of cohousing and can thus be seen as the scope or viewpoint used to look at cohousing. Together this leads to the main aim and research questions that are fundamental for the rest of this thesis.

1.1 Cohousing and its relevance for planning

The relevance of cohousing for planning is that cohousing projects could inflict a change on the relation of the planning official with society and on the use of current municipal planning instruments. Before this is explained the notion 'cohousing' and the context thereof are described. Cohousing is a term often used to point to a specific kind of housing whereby a community of people builds and lives together. In western societies it is an unusual kind of living, in contrast to developing countries where it is still normal to live with whole families and communities on a small plot with shared facilities like water and sanitation. In contemporary Western societies building and/or sharing a house with non-relatives is mainly done in student dorms, monasteries and since the sixties in the upcoming form of what is specifically regarded as cohousing.

Cohousing is an ambiguous term wherein emphasis can be put on building a house or a set of houses together or on living together at the same plot of land with shared facilities. Cohousing initiatives can thus be divided between groups 'building together' and groups 'living together' (Tummers, 2011). The second kind of cohousing gets a lot of attention because it is a renewed form of living in western societies wherein people structure their life in another way, thus becoming for sociologists (Bamford, 2005; Choi, 2004) but also for political scientists (Poley, 2007; Renz, 2006), planners (Marcus, 2000) and architects (Tummers, 2011) an interesting case. Reasons to look into it are among others its community life and effects on social cohesion, its internal democracy, the changing physical structure of the surrounding living environment, the different financial distribution and the changing spatial lay-out of the houses. The Dutch cohousing practice can be divided according to the division in the international practice. The

Dutch case consists of 'centraal wonen' (central living) and 'collectief particulier opdrachtgeverschap' (collective private commissioning) (CPC).

All types of cohousing have a common denominator: they all revolve around a group of individual consumers or households who have the goal to arrange their housing themselves. This arrangement can be only a process of building, only a process of acquiring a plot with houses to live in or a combination of the two. Most authors distinguish two waves of interest in the phenomenon: a first wave in Europe and a second wave in Northern America (Bamford, 2001; Sargisson, 2010). Sargisson (2010) points to the fact that European cohousing is more often based on rented housing than in Northern America (Sagisson, p. 1). Motivation for cohousing in general comes inter alia from the emancipation movement (Toker, 2010), the wish to live sustainably (Bamford, 2001; Tummers, 2011), the larger social cohesion (Williams, 2005) and focus on community life (Tummers, 2011). Sargisson (2010) adds a more political orientation in Europe (first wave) and a more pragmatic and non-ideological orientation in Northern America (second wave).

Tummers (2011) has collected several classifications that are used to position cohousing. His aim is to find a common denominator from an architectural/planning perspective. He mentions four classifications which are used in literature. These are primarily based upon on an analysis of how involved persons perceive their projects themselves (p. 2):

1. The degree of participation and self-management
   This degree is based upon the organization of cohousing groups, seen by themselves as independent of others and as a grass roots initiative.
2. The approach to ecology/concept of sustainability
   Based upon the extent in which projects aim at being sustainable/try to live and build ecological.
3. The distance to society (alternative to mainstream)
   The amount of self-proclaimed otherness within the cohousing group, mainly inspired by intentional communities like hippies and religious communities like monasteries (Meijering *et al*., 2007).
4. Time and historical context
   This points to the historical context wherein projects are developed and the timeframe wherein they can be placed. It has a link with the distinction between the first and second wave (Sargisson, 2010) but classifies cases broader regarding all times and continents.

These four classifications could be useful in trying to classify projects. It could shape a clear picture in the ambiguity that can be distinguished in the use of terms in the international practice. However, these classification-systems are rather broad and all four are overlapping

without one being excluded. It is also not clear how to classify individual projects based on the four themes. The difference and ambiguity of the classifications and the different characteristics of cohousing projects as described by Tummers (2011) do point however to the necessity to position individual cohousing project but also types of cohousing in relation to 'normal' housing. Normal housing projects are in this respect projects where project developers or housing corporations build a house. Individuals or groups of citizens buy the house to their liking. They thus don't have a say at forehand and are bound to strict rules concerning rebuilding or adjusting their bought house. Project developers and housing corporations have also to comply to strict rules and spatial plans constituted by the government.

The involvement of the government and the role of planning in cohousing has our special attention. This because cohousing could ask a change in thinking about planning. Currently most of what is said deals with the living together focus on cohousing and not with the building together focus on cohousing. Williams (2005) for example points to the effort of national policy to create liveable communities and neighbourhoods designed to encourage social interaction via cohousing (p. 195). According to Williams cohousing is also attractive for governments when they try to achieve sustainability targets (p. 202). Williams (2005) makes, next to describing these more motivational aspects for governments to promote cohousing, only a small recommendation for governments: 'the lessons learnt from cohousing should also be borne in mind for the successful future development of the neo-traditional neighbourhoods, (…) especially in terms of social contact design and resident involvement in the design process' (p. 225). Tummers (2010) has done a short review into stimulation policy in some countries, showing that several Western-European countries support cohousing directly. Also Bamford (2001) only points to the influence of the motives on public and social authorities (p. 10), without further reverence to the involvement or policy of authorities regarding cohousing. Boelens&Visser (2011) look into the concept of CPC in the Dutch context and outline the effort of the government who actively developed policy with a target of 30% of the total build housing stock that has to be built by CPC. The conclusion is however that this policy seemed to impede the CPC effort (which decreased from 17% to 10% between 1995 and 2010).

Looking at the role of planning with regard to cohousing the main aspects are situated at the building together part. Building together, or in de Dutch case CPC, revolves around the process of acquiring land, getting permission to build on this plot of land and creating houses based upon the preferences of a group of builders. Spatial planning itself is of concern of the government on different spatial scales, housing often being situated on the local scale. To influence housing spatial planning is used by the government in several different ways. For example via plans, regulations, communication and finance (Voogd, 2006). These kinds of instruments and the way government uses them could be different in dealing with cohousing

projects. Instead of dealing with project developers who build large stocks of houses based upon rules specified by the government, municipalities have to deal with small groups of people with particular wishes and less experience with the building process. Thus it becomes possible that cohousing influences planning and housing policy on a local scale. Being different from other housing projects the practice of cohousing could ask or even demand a new way of thinking about planning and of doing planning, both process-wise as content-wise. This is the first central theme of this research and it leads to the necessity to position the concept of cohousing in theory, subject of the next section.

1.2 Theoretical positioning

Current debate in planning revolves around the amount of influence governments need to have in planning with regard to both market parties and society (Alexander *et al.*, 2012; Moroni, 2007, 2010b). This debate is under influence of a shift towards communicative kinds of planning that revolve around optimization of planning processes instead of content based planning (De Roo, 2003; Faludi, 2000; Innes, 1995).

Cohousing, as a demand driven kind of housing, could ask of planning officials to focus on the process. The argument for this is that one of the key elements of cohousing is the wish of people to have influence on their living environment. People want to have a say in the content of planning. This influence can differ per situation, thus leading to the necessity for planning officials to deal with a shift towards process oriented planning but also to systematically deal with the wishes and demands of cohousing initiators. These wishes and demands point to a much more complex planning situation. People in cohousing want to have the opportunity to seek the best quality of their living space and want to have autonomous involvement therein (Boonstra&Boelens, 2011). There are thus a lot more actors involved in planning. Due to this higher autonomy it is thinkable that the surrounding environment and social networks of people have a larger role than before, because people want to be informed and the environment becomes evaluated by higher standards. Herein content, process and context play a role, all seemingly leading to a higher complexity with more aspects that have to be dealt with by the planning official. In order to do this it is necessary to change planning approaches to deal with cohousing projects.

In the determination of the necessary change of current planning approaches more adaptive, evolutionary strategies, coming from a systems approach, are suggested (i.e. Boonstra&Boelens, 2011; Cartwright, 1991; Domanski, 1983; Rittel, 1972). In developing such strategies various scholars argue that planners have to acknowledge processes of underlying, self-organising spatial developments (Boonstra&Boelens, 2011; Domanski, 1983; Moroni,

2007). Boonstra&Boelens (2011) already hint upon two theoretical concepts that could be used to acknowledge these processes in the case of cohousing: self-organization and participation. Tummers (2010) supports these concepts and draws them together in his first classification system for cohousing projects (p.2) (see chapter 1.1).

Self-organization can be understood as a process wherein new structures or patterns emerge through interaction between elements within a system, despite the absence of outside coordination (Heylighen, 2002). In a socio-spatial system, defined as a part of the physical environment in relation with the human population living on it, social groups or individuals can be regarded as the elements (Fuchs, 2002). In this context a lot of different processes could be seen as self-organized in the definition of Heylighen (2002), cohousing could be one of these (Boonstra&Boelens, 2011). Self-organization seems to be relevant for cohousing because in it people have the opportunity to seek for the best quality of their living space (content) with enough room for autonomous involvement (process) while taking into account a larger role of the surrounding environment (context) (Boonstra&Boelens, 2011).

Participation in the definition of Arnstein (1969) deals with the involvement of the governed in governance. Compared to normal housing this involvement is for cohousing rather decisive. In normal housing the governed don't have a say in the way their housing is organized, in cohousing citizen want to have a larger involvement in the organization of their housing. Participation and self-organization can both be used to look at cohousing. It could provide insight in the way how planning officials have to deal with this phenomenon and how the planning official's instruments have to change accordingly. The second central theme of this thesis is to describe the way how these two concepts give insight in cohousing and how this is beneficial for spatial planning.

1.3 Aim and research questions

The following aim, main question and sub-questions are developed to guide this research.

An analysis of the possible change cohousing has on planning and the role of the planning official is the aim or objective of this research. The theoretical concepts of self-organization and participation are used to analyse cohousing in the context of spatial planning. This thesis tries to contribute to the debate around a more process-oriented planning system and also deals with the usability of the concept of self-organization for planning.

The main focus of this thesis is the contemporary practice of building together as explication of cohousing. Building together has clearer implications for spatial planning than living together. CPC in the Netherlands is the practical case because it provides sufficient and extensive experience with the building type of cohousing. The main focus in these projects is put on the role of municipal planning officials in the Netherlands. These are more and more confronted with CPC projects and have a large set of (legal) instruments. Both these instruments and the role of the municipal planning official (throughout the thesis they are called planner or policy-maker) are looked into.

To structure this research questions are formulated. The main questions is formulated as:

'How can the concept of self-organization enhance the role of municipal planning officials and instruments in Dutch cohousing projects?'

This question is operationalized into 5 sub-questions:

1 How can cohousing be conceptualised and what is its relevance for current day spatial planning?

2 What are the main characteristics of self-organization and participation with regard to planning?

3 How can Dutch spatial planning and the role of local planning officials therein be defined and what are recent trends?

4 To what extent can cohousing be explained by self-organization and participation?

5 Which effects of cohousing, explained with self-organization and participation, can be seen on the role of policy-makers and spatial planning?

1.4 Structure of the thesis

Underlying this research two aspects are relevant. The research is structured according to a scheme constructed by Flowerdew&Martin (2005: p. 14) describing the relation of the research and its context (see figure 1). This scheme is used for describing the methodological steps in table 1. In this chapter the research aim and research questions (§1.3) are stated, based on the theoretical framework. In chapter 2 an extensive theoretical framework is given, concluding with the conceptual model. In chapter 3 the research design (steps 5, 6 and 7 of table 1) is dealt with.

In chapter 4 the Dutch spatial planning context and the three cases are described. The cases are named after the place they are located and are in:

- Wijngaarden (municipality of Graafstroom)
- Zwolle (municipality of Zwolle)
- Almere (municipality of Almere)

Table 1 - Methodological steps

1	Substantive theory	§ 2.1-2.6
2	Research aim	§ 1.1
3	Research questions	§ 1.3
4	Underlying philosophies	§ 2.1
5	Required data	§ 3.1
6	Methodological approach	§ 3.2
7	Research techniques	§ 3.3-3.5

In chapter 5 both the theoretical framework, the conceptual model, the analysis of cohousing policy and the results of the case study are discussed in a synthesis. This chapter forms the critical basis for the conclusion in chapter 6.

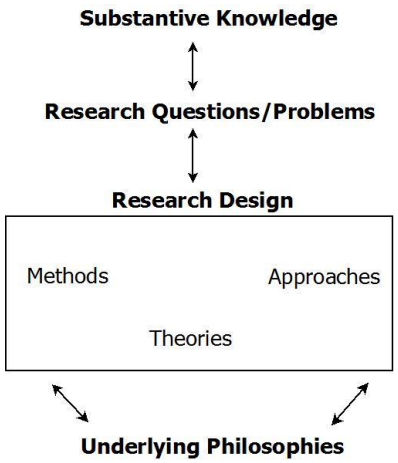

Figure 1 – Research and its context (Flowerdew&Martin, 2005).

2 Theoretical framework

In this theoretical framework the theoretical concepts used in this research are described. The main aim of this chapter is to give insight in the notions relevant for interpreting and analysing cohousing in relation to planning. It thus tries to put forward relevant questions and tries to push our understanding of cohousing to a next level. First systems theory as basis for self-organization is described. Systems theory provides arguments for self-organization as concept and also gave way for the already mentioned change in planning. Self-organization and planning are the topics of the next two sections, whereby the main characteristics of these notions are described. In section five a description of the concept of participation is given, based upon the ladder of participation described by Shelly Arnstein. In the last section of this chapter the several notions are put into a conceptual model which is used to make the relations insightful and distil hypothesis for the rest of the thesis.

2.1 Social systems theory

Systems theory is the name of the study of systems in general and can be related back to philosophical discussions in the time of Descartes (Bausch, 2002). The fundamental idea of systems theory is that everything is part of constantly larger systems wherefore fundamental characteristics can be formulated (Assche&Verschraegen, 2008; Bausch, 2002). Systems theory is primarily used to model systems via a conceptual model so the structure and relations therein become clear (Mansour, 2002). In the natural sciences wherein systems theory is developed three concepts play a role: controllability, observability and stability, whereby feedback mechanisms regulate the system (Mansour, 2002). These aspects however can't be copied to the social sciences since social systems are highly complex, can't be controlled and are often less stable. This is due to the fact that unlike machines humans respond to outside stimuli (Egner&Von Elverfeldt, 2009; Mansour, 2002: p3).

Especially Niklas Luhmann has outlined therefore a systems theory for social contexts, commonly known as social systems theory. He used the structure-function discussion in sociology and the general systems theory as developed in natural sciences to build up his theory (Luhmann, 1984; Stichweh, 2001). In this case a possibility to interpret systems theory is to see it as a theory of open systems which implies a focus on exchange processes connecting a social system and its environments (Stichweh, 2001: p. 9098). As Luhmann (1984) himself argued, 'systems theory' is a catchall concept and it has no unambiguous meaning (p. 1). It is hard to define exactly. Luhmann therefore developed it as a comparative theory to distil

meaning for one system out of another with respect for different levels or 'types' of

systems (Luhmann, 1984). An important aspect is the concept of meaning that is different from natural systems. People give meaning, thus social systems emerge and evolve differently than systems in physics, making this the vital distinction between the two (Luhmann, 1984; Mansour, 2002).

The application of social systems theory can be informative, describing relations in a social context (Luhmann, 1984) or more formal via the constructing of testable models (Dahme, 1985; Mansour, 2002; Vancouver, 1996). Application of systems theory in planning and geography is often done from the perspective of a contribution of this theory to common planning and geography theories (Van Assche et al, 2010; Van Assche&Verschraegen, 2008; Wan, 2010). Hereby the distinction between physical and social systems and their related (epistemological) perspectives is clearly apparent (Egner&Von Elverfeldt, 2009). In planning the analysis of the working of systems is described by Rittel (1972) as "attacking problems of planning in a rational, straightforward, systematic way, characterized by a number of attitudes which a systems analyst and designer should have" (p. 390). Rittel puts the focus on an holistic and interdisciplinary approach (Rittel, 1972). He criticizes the 'first generation systems theory' and proposes a new, 2.0 version of it. Identifying differences between the two, the first can be characterized by the following sequence (Rittel, 1972: p. 391):

(1) understand the problem
(2) gather information to understand the context
(2b) (the creative leap or great idea)
(3) analyse the information
(4) generate one or more solutions
(5) assess the solutions
(6) implement
(7) test and
(8) if necessary modify the solution and learn for the next time

Putting this sequence in the realm of planning, Rittel sees society as an open system (although this wasn't formulated as such yet) and puts four problems to the fore, all related to the concept of rationality. To cope with these a complexity perspective can be taken to understand systems. It leads to a better understanding and a hold on more complex or (in Rittels terms) 'wicked' systems.

Due to this more holistic, complex systems view, spatial patterns and processes are more and more understood as part of a complex and changing world (Cartwright, 1991; De Roo, 2003). In developing new planning strategies to deal with this dynamical world various scholars argue

that planners have to acknowledge complexity and could make use of complexity theory to incorporate essential notions thereof in planning (Byrne, 2003; Cartwright, 1991; Domanski, 1983; Moroni, 2007; Portugali, 2006). This is also visible in the understanding of systems by Rittel (1972). Seeing systems as complex, non-linear and open is one of the main aspects of complex systems thinking and complexity theory (Byrne, 2003). This means unpredictability of systems wherewith planners have to deal. It also sees systems as evolving in a random way, but on higher levels with recognisable order. Although this theory also asks for a rethinking of epistemology, it is here seen as a specific scope for systems theory.

This scope is used here because society can be seen as a highly complex system that can only be understood when taking into account uncertainty, non-linearity and openness within the system. A notion within complexity theory is self-organization; a process wherein new structures or patterns emerge through interaction between elements within a system, despite the absence of outside coordination (Heylighen, 2002). Self-organization is sometimes also recognised as emergence (Boonstra&Boelens, 2011). This concept will be dealt with more in-depth in the next section. Some notions need to be further elaborated on because they are directly intertwined with self-organization, although they are often rather vague and their meaning ambiguous (Heylighen *et al.*, 2006).

An important notion is that complex systems are open. This means that there is an exchange of resources with the environment of a system (Anderson, 1999). The openness of the system gives the possibility of coevolution, whereby openness and coevolution are sometimes seen as the same (Boonstra&Boelens, 2011). However they can't be interchanged because the openness of systems to their surrounding is a condition for coevolution (and for understanding a system as complex) but doesn't lead to coevolution per se. Coevolution means that systems and subsystems influence each other regarding the change they undergo in time (Anderson, 1999). The openness of a system is necessary for the influence of other systems whereby over time dynamic equilibriums can come to existence wherein the systems oppose or synchronise each other (Anderson, 1999; Boonstra&Boelens, 2011). The complexity perspective draws upon an iterative, evolutionary approach whereby systems behave in a non-linear, dynamic way but do evolve based upon earlier sequences (Anderson, 1999; Warren et al., 1998). Non-linear behaviour of a system is also an important notion because it gives a system an unpredictable time-path. Non-linearity means that there is no proportionality between cause and effect, thus leading to unpredictability and chaotic behaviour (referred to as the butterfly effect) (Heylighen *et al.*, 2006). This means that a system can't be engineered in a desired direction, however, it can be steered via 'evolutionary approaches' (Moroni, 2010a). This is for example an underlying assumption in transition management (Rotmans *et al.*, 2001). Openness and non-linearity are thus characteristics within a system, coevolution is an aspect related to the interaction between

different systems (which becomes possible if systems are open and which can induce non-linear behaviour of a system).

A complex systems perspective is suitable to understand socio-spatial systems (Byrne, 2003). Socio-spatial systems, defined as a part of the global physical environment and the human population living in it, are in interaction with other systems and their respective environment. Also the human population is directly and indirectly in constant interaction with the physical environment. Both the human population and the physical environment can be regarded as open sub-systems of a socio-spatial system. Essential for the use of self-organization for explaining cohousing is this notion of the socio-spatial system. Cohousing can be seen as occurring in this system, which is open and thus possibly subject to complex processes (Byrne, 2003). Taking this stance –a complexity perspective on cohousing and socio-spatial systems- means that planning needs to be adjusted accordingly. This could be a change towards an adaptive, incremental (Cartwright, 1991) and more integrative (Byrne, 2003) and interactive (Tjallingi&De Roo, 2010) approach. Before we turn to spatial planning we now turn first to self-organization.

2.3 Self-organization

Self-organization is an upcoming notion which currently has the attention of scholars in various fields, for example in ecosystems (Camacine *et al.*, 2001; Krone&Guan, 2006), organizational science (Anderson, 1999), and planning related issues such as city development and neighbourhood planning (Domanski, 1983; Vardy, 2009). The concept or idea can be defined as: a process wherein new structures or patterns emerge through interaction between elements within a system, despite the absence of outside coordination (Heylighen, 2002). The work of biologists regarding the patterns of organization in ant colonies is a concrete example of how the notion of self-organization can be explained (Bonabeau *et al.*, 1997; Camacine *et al.*, 2001; Detrain & Deneubourg, 2006). This comparison is useful as metaphor to explain self-organization as theoretical complex notion because the concept in ant colonies is somewhat related to human self-organization. A deficit in this comparison being mainly the internal complexity of the human individual versus the ant (Bonabeau *et al.*, 1997; Portugali, 2006). The relevance of this comparison is to show how the behaviour of autonomous elements and some simple rules self-organize into highly complex structures.

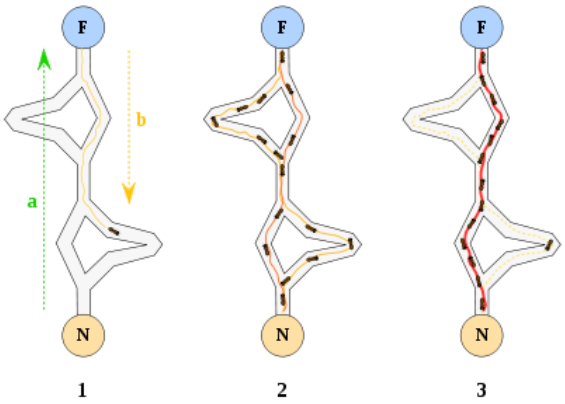

Figure 2 – Self-organization in an ant colony looking for food (source: Wikimedia.org, 2012)

Ants are 'social insects' living in colonies whereby every ant has its own specific task. Ants communicate via pheromones, which they locate or 'smell' via their antenna's. For foraging, worker-ants search the area for food (see figure 2, a, F). If a worker-ant finds food, it leaves a trail towards the nest (b) so other ants can find the food source. In the beginning this smell is not very strong, and ants go around the original path, creating new paths whereby they sometimes find cut-offs and sometimes lengthen the path (see figure 2, step 2). Every ant, leaving a trail over the former trail makes the scent stronger. The rule 'follow the strongest scent' makes that in the end the shortest path remains, because this costs the least amount of time to travel and thus after a while gets the strongest presence of pheromones (3) (Bonabeau *et al.*, 1997; Detrain & Deneubourg, 2006). This is exactly what is understood by self-organization: due to communication between elements in a system without outside control and some simple rules, a pattern or structure emerges (Heylighen, 2002).

For the notion of self-organization several definitions and accompanying uses can be found. For example Boonstra&Boelens and Heylighen, look more from a social-political perspective at self-organization, using a wider definition then for example Portugali and Haken who have a more narrow, spatial perspective on self-organization (Boonstra&Boelens, 2011; Haken&Portugali, 1995; Heylighen, 2002; Portugali, 2006, 2008). The difference between these wider and narrow focus in planning literature mainly revolves around the general characteristics of self-organization in all social systems (the wide perspective) versus more specified characteristics of self-organization defined for specific kinds of spatial systems (the narrow perspective). The second consists of an explication of the general characteristics, for example about a set of elements, the exact non-linear behaviour or the interaction between specified systems. Boonstra&Boelens (2011) give next to the socio-political and spatial definition an economic definition. They also give a main critique from a post-structural perspective. Drawing upon Luhmann's systems analysis Boonstra&Boelens (2011) warn for the danger that defining the system can lead to the pitfall of simplifying it by 'closing' the system, thus reducing the amount of influence of the outside (or neglecting it in the analysis of the system). They also point to the relativistic power of self-organization: "by assuming something as self-organized it becomes subject of complexity and complex systems which ultimately can reduce the significance to 'just' one autonomous process among several others" (Boonstra&Boelens, 2011: p. 111). Their critique thus leads them to leave the system outside of the analysis and solely refer to self-organization. This is done by an 'actor-network approach' which instead of focussing on a system, focusses on the elements and its relations (actor and network) (Boonstra&Boelens, 2011: p. 112-113). This doesn't implicate that the system can be referred to the waste bin; it is still necessary to distinguish the elements from a specific and predefined system.

Self-organization is also considered to be essential for the development of a system since it helps it to renew and innovate (Batty, 2012). Socio-spatial systems are directly and indirectly influenced by both social and natural self-organizing (and thus complex) systems, whereby socio-spatial systems also can be seen as complex and self-organized at multiple levels, thus renewing itself constantly (Batty, 2012; Haken&Portugali, 1995; Portugali, 2000).

Building upon this discussion and the characterisation of self-organization the definition given in the beginning of this section can shed light on the most important characteristics of self-organization in a socio-spatial context. Self-organization was defined as a process wherein new structures or patterns emerge through interaction between elements within a system, despite the absence of outside coordination (Heylighen, 2002). Three main characteristics that can be distilled out of this definition are:

1. Process oriented
2. Focus on interaction or relations within a system
3. (Relative) autonomy of the elements

The first characteristic is process oriented; a pattern or structure can only arise during an amount of time, whereby self-organization as such doesn't say anything about the content of the structure but only about the way this content appears through the elements. Thus it is process oriented and placed within a timeframe. Hereby all content-related aspects are defined by for example the substance of the elements but never by the process of self-organization as such. Regarding the second characteristic: there have to be elements (as indicated before) but also a relation between these elements. This relation can be described in terms of attractors which pull a system to a certain equilibrium (structured stable situation) (Batty&Xie, 1999; Heylighen, 2002) or in terms of (general) rules as is visible in the example of the ants and applied in planning theory by for example Alexander *et al.* (2012) and Moroni (2010b). This means that there has to be some kind of communication and exchange of information (Haken&Portugali, 2003; Portugali 2006, 2008), which itself is complex following the dual complexity as indicated by Portugali (2006, 2008). The third characteristic is the autonomy of the elements that are self-organizing within the system. The elements have to behave autonomous. This last point raises also a very important question in light of cohousing and socio-spatial systems: is it possible to have self-organization but also some outside control? In order to use self-organization in relation to planning it seems to be necessary to have some kind of mediation between autonomy and the relative control of the government over the physical environment. In chapter 5 an attempt to mediate between these two notions is illustrated.

The described characteristics of self-organization are important in conceptualizing cohousing with the use of the concept of self-organization. It is essential that all three are extant for self-

organization: without time there is no organization, without relations there is no system wherein this organization can take place and without autonomy the organization is controlled from a higher level. This also is the other way around: if individuals within cohousing can behave autonomous and are in contact with one another they need to go into a process in order to create new, self-organized structures. The three characteristics are thus mutually inclusive within the notion self-organization. In order to place cohousing and self-organization in a socio-spatial context, the idea of spatial planning has to be defined. This is done in the next section.

2.4 The concept of spatial planning

Spatial planning is like many other terms and notions in this thesis also an ambiguous concept. It has two components: spatial and planning. 'Planning' revolves around a deliberate process whereby both means and ends play a role (Tustian, 2001; Voogd, 2006). 'Spatial' means 'relating to space', thus spatial planning is for example defined as a deliberate process to reach a prospected spatial configuration via certain means (Voogd, 2006). In planning several aspects play a role: plans, documents and rules that define the means and the ends of planning. Combined with theoretical perspectives on planning and its larger (social and spatial) context it can be called the planning doctrine (Faludi, 1985; Roodbol-Mekkes *et al.*, 2012). Next to this there are actors involved who shape the process and thereby also the end-product of planning (Allmendinger, 2002a; Faludi, 2000). Dividing this in content (what is going to be planned) process (in what way and thus with whom is it going to be planned) and context (which related aspects are involved) can also be fruitful to distinguish different aspects within planning.

What is currently apparent at least in planning theory is a perspicuous shift from technical planning whereby a plan can be evaluated on the final outcomes towards a more communicative or 'soft' kind of planning where planning revolves around an optimal process (De Roo, 2003; Faludi, 2000; Innes, 1995). As already said before, a complexity perspective on spatial planning asks for this shift to go towards an adaptive, incremental (Cartwright, 1991) and more integrative (Byrne, 2003), communicative or interactive (Tjallingi&De Roo, 2010) and hermeneutical (Bersselaar, 2003) planning approach. This means that the focus of planning shifts from content-specific aspects like technical details and physical configuration to process-specific aspects like communication, learning by doing and actor-analysis. Giving room to self-organization in society can push this shift even further, towards a focus on all three aspects (content, process and context) but with greater emphasis on the subjective role of the planner and the specific context of every planning problem (Boelens&Boonstra, 2011; Flyvbjerg, 2004). Planning in a more self-organized society, following the definition in the former section, asks for a more integrative and holistic, but meanwhile specific and context-based focus of planning.

Self-organization seems to be relevant because it gives people the opportunity to seek for the best quality of their living space (content) with enough room for autonomous involvement (process) (Boelens&Boonstra, 2011). The surrounding environment and the social networks have a larger role than before because people want to be informed and the environment is evaluated by higher standards (context). This perspective thereby asks for a participatory and deliberative model of planning because such a participatory model increases interaction within a system and is thus more effective in dealing with complexity (Wagenaar, 2007).

Already a shift is visible wherein self-organization can be placed as the following step. This shift, as indicated above is going towards a more communicative or 'soft' kind of planning where planning revolves around an optimal process. An important aspect within a more process oriented planning system is collaboration or participation. In the next section the concept of participation is outlined and used to make some sense of self-organization in spatial planning. Together the three aspects in spatial planning (content, process and context) and the notions of self-organization and participation within planning are used in the empirical part to shed light on cohousing.

2.5 Participation

Participation and collaboration are both used to indicate the same aspect in planning: the amount of involvement of citizens. The second however revolves around the collaboration of public institutions with society (Healey, 1998) while the first, as shall be shown in-depth in this section, deals with individuals or small collectives of citizens. Collaborative planning, as well as communicative planning and participatory planning all emphasize another aspect in planning. Respectively this is the amount of collaboration between state and society; the focus on communication between actors in the planning process; and the amount of participation of citizens and groups of citizens in planning and decision-making. All point to a more process-oriented planning style whereby optimization of the process is the main focus (Allmendinger, 2002a; De Roo, 2003). The choice to take participation and not collaboration or communication as primary explaining frame is based upon the more individual, lower level focus of participation (in comparison to collaboration). It also has the ability to see participation as a means to an end defined in process-related aspects as well as in content-related aspects. Hereby participation is apparent in discourse since the seventies in planning and governance literature (Arnstein, 1969; Huntington&Nelson, 1976; Strange, 1972) and in self-organization literature (Boonstra&Boelens, 2011; Fuchs, 2002; Heylighen, 2002) leading to a substantive frame of reference to position self-organization and cohousing.

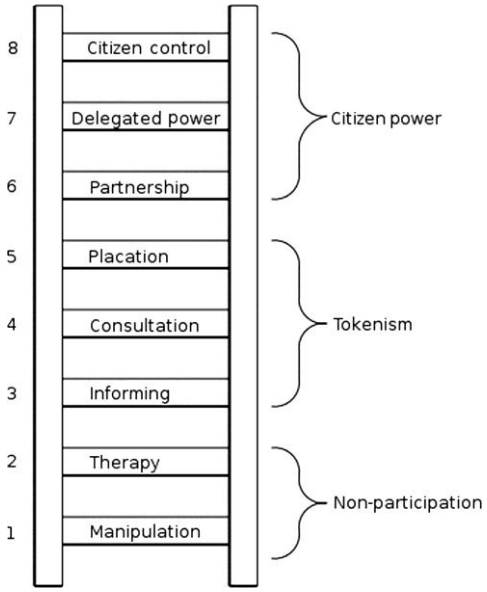

Figure 3 – The ladder of participation (Arnstein, 1969: p. 217)

The concept of participation found a flight during the sixties due to the discussion in both America as in Europe concerning power redistribution and social inequality (Arnstein, 1969; Strange, 1972). In defining participation as the involvement of the governed in governance, the ladder of participation as sketched out by Shelly Arnstein (1969) has been influential in both planning theory and in planning practice (Lane, 2005; Tritter&McCallum, 2006). With her definition and systematization of participation the ladder developed by Arnstein makes citizen control versus governmental control visible, together with the several possible options in between. It thus provides an instrument to look at power of citizens and government in both policy as well as in public processes (Arnstein, 1969; Tritter&McCallum, 2006). Arnstein sees citizen participation as 'a categorical term for citizen power' (p. 216). As a measure in policy it indicates the possible inclusion of citizens in political and economic processes. This inclusion however is insignificant if it doesn't involve some power for the participating citizen (p. 216). A scheme is drawn to make insightful not just the amount of participation but the amount of power as expression of the real power citizens have within public policy and processes (p. 217). In figure 3 the eight tiers within the ladder are outlined (adopted from Arnstein, 1969: p. 217), whereby there is a distinction between participation (tier 3-8) and non-participation (tier 1 and 2). Tiers 3-8 are further divided into citizen power and tokenism, the latter pointing to some power for citizens but not decisive, while in participation via partnerships (6), delegated power (7) and citizen control (8) citizens have a decisive say in policy or public processes.

Although simplified this ladder can be helpful to position cohousing and self-organization in planning. There is a division possible in the concept of participation and its understanding with regard to planning; political participation versus citizen participation. The ladder of participation can be placed in both 'traditions'. Next to this there are two substantive critiques on the simplification of Arnstein. The first is the strong dependence of the notion of power as such, whereby a rational and knowledge based perspective is missing: there is a large diversity in knowledge and expertise in society (Tritter&McCallum, 2006). The second aspect is that during the past decades citizen participation in planning became sometimes an end in itself, whereby planners neglected the possibility that participation is not necessary or maybe even contradictory to other ends of planning (Strange, 1972; Tritter&McCallum, 2006).

Within participation the already mentioned division into two traditions is essential to shed light on the use of the concept in literature. There is a community talking about citizen participation and a community talking about political (or: administrative) participation (Glass, 1979: p. 181). The first understanding of participation takes a focus on the role of citizens and the power they have in politics but also in economics and society and the effects on the physical environment (Strange, 1972; Glass, 1979). The second has a more narrow focus and is linked to the concept of decision-making, which needs to be decentralized and open to even the layperson in society (Strange, 1972; Glass, 1979). Huntington and Nelson write: 'By political participation we mean activity by private citizens designed to influence government decision making' (Huntington&Nelson, 1976; p. 3). From a planning perspective and for a self-organizing society this distinction is useful to determine in 'what' the citizen is participating. Seen from a political participation perspective, self-organization in the definition used here (see §2.3.) is happening outside of the system or process of policy-making (Boonstra, 2012; Boonstra&Boelens, 2011). Seen from the first perspective self-organization seems to be the same as 'citizen control' on the ladder of participation, with this prerequisite that participation is placed in a broader system than just the political. With this discussion it is possible to position self-organization against the ladder of participation, although the context -the chosen system- matters. Boonstra&Boelens (2011) specifically place self-organization outside the ladder of participation, emphasising the comparison as: 'the notions of self-organization and participation are often mutually confused' (p. 109). However this is a definition of participation in the political, and thus, decision-making context (p. 109). This places Boonstra&Boelens (2011) explicitly outside the wider context of participation to reach a common end, for example a specific spatial configuration of the physical environment. Since it is possible to see self-organization as the eight tier in the ladder of participation it raises the question in what light participation has to be seen with regard to a mediation between self-organization and state control in spatial planning. This question is further dealt with in chapter 5.

As said earlier, there are two substantive critiques on the ladder of participation. The first is its focus on power (Arnstein, 1969; Tritter&McCallum, 2006). In identifying this weak point Tritter&McCallum (2006) point to the direct link of power with knowledge and expertise as being the main flaw in Arnstein's ladder (Tritter&McCallum, 2006: p. 166; Flyvbjerg, 1998). What is problematic in the concept as defined by Arnstein is the seeming struggle for a finite amount of power between two parties (p. 164), which is a rather simplistic vision on power, following Flyvbjerg (1998) and Tritter&McCallum (2006). Participation, especially constructed according to the highest tiers in Arnstein's ladder can be obstructed by a lack of expertise and knowledge, even if there is no lack of power for citizens. An important conclusion of Arnstein is that for genuine participation a shift of power is necessary (Arnstein, 1969; Lane, 2005). This is only possible if this citizen 'empowerment' is also combined with a conveyance of knowledge

and expertise to give the citizen genuine power (Arnstein, 1969; Lane, 2005). The problems involved in this conveyance can lead to a necessity of outside control, in the case of participation this means that power remains in the hands of the government and that the eight tier can't be reached. This can also be a problem in the case of cohousing. Therefore this specific critique will be taken into account in the empirical part of this research. It namely raises the question how to deal with a lack of knowledge and expertise in a cohousing project, a lack that can obstruct the ends of a cohousing project: housing according to the wishes of the group of participants.

The second critique on the ladder of participation is the tendency to see participation as a goal of planning (Glass, 1979; Lane, 2005; Strange, 1972; Tritter&McCallum, 2006). The system of the ladder is built upon the notion that people need to participate in planning. It is constructed thus that policy and processes can be evaluated upon their amount of participation so the way ahead (more participation) can be taken, without evaluating the reasons behind (non)participation. Lane (2005) points to this by emphasising the context of the planning and decision making system wherein participation has to be embedded (p. 284). The motivation for participation and boundaries for the amount of participation that is possible and required can be distilled from the context of a project. This brings us back at the beginning of this section concerning spatial planning; participation first and foremost is a means to specific ends within the spatial planning system. Where participation as such can be seen as a general technique and the ends wherefore it is implemented combined with the context wherein this is done define the exact limits and possibilities of participation.

To bring the notions of planning, self-organization and participation together it is necessary to position them relative against one another. This is done in a conceptual model. This model is the topic of the next section. It can be seen as the bridge between the theory of this chapter and the practice of the next 2 chapters.

2.6 Conceptual model

To use theory in an systematic and structured way a conceptual model is used. This is a tool which can have several functions. The first is to conceptualise theory to look at or conceive an object of study (Allmendinger, 2002a; Judge *et al.*, 1995). The second is providing a frame of reference through which reality can be examined. Third it could, in a heuristic way, lead to asking questions and developing testable hypotheses about the subject matter (Judge *et al.*, 1995: p. 3-4).

The main question for this theses, and thus for the construction of the conceptual model, is how the concept of self-organization can enhance the role of municipal planning officials and instruments in cohousing projects. The conceptual model is used to operationalize this question by constructing three hypothesis, which are introduced and explained in this section. These hypothesis form the basis for the analysis of the cases. The main function of the conceptual model is to make the relations between theory and practice insightful and clarify the assumed relations between the key notions stated in the main question. The model depicts the possible relations these notions have with each other in a schematic and simplified way. The conceptual model is depicted in figure 4.

Boxes & relations

The conceptual model consists of four boxes and two relations. In the model several notions already discussed in this chapter can be recognised. Hereafter first the model is explained then the role of the planning official is described in relation to it and lastly the hypothesis are dealt with. All notions dealt with here are summarized in figure 5, where the conceptual model is extended with the description of the notions.

Socio-spatial system: The whole conceptual model can be seen as a socio-spatial system. In this system there can be two subsystems identified: cohousing and spatial planning. The interaction between the two subsystems is the subject of

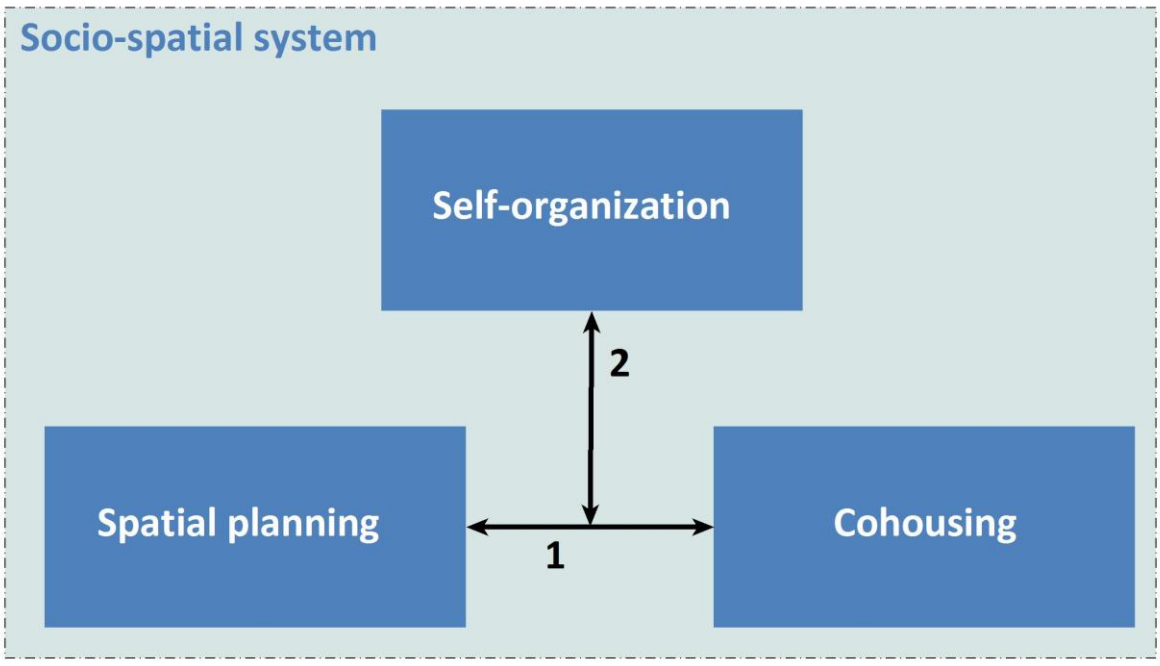

Figure 4 – The conceptual model

this thesis. Of the characteristics of the system two are identified: the openness of the system and self-organization. The system is open and can thus be influenced by other systems that are outside of this system (indicated by the dotted line around the model).

Self-organization: This box symbolizes the concept of self-organization as theoretical concept and as a characteristic of the socio-spatial system wherein cohousing is occurring. It could be used to look at cohousing and the relation of cohousing with spatial planning.

Spatial planning: This box symbolizes spatial planning in its static form. This means that for example spatial rules, spatial policy and human - and financial resources are located in this box. Since this thesis revolves around governmental planning the municipality as organization can also be placed in this box.

Cohousing: This box deals with cohousing projects. The group executing the project can be placed in here, together with all aspects related to the project (amount of houses, location of the houses, etc.).

Next to these boxes there are two relations distinguished in the model. The first between spatial planning and cohousing, the second between the first relation and self-organization.

Relation 1: This relation has to do with the direct interaction of spatial planning with cohousing and vice versa. It expresses also the role of municipal planning

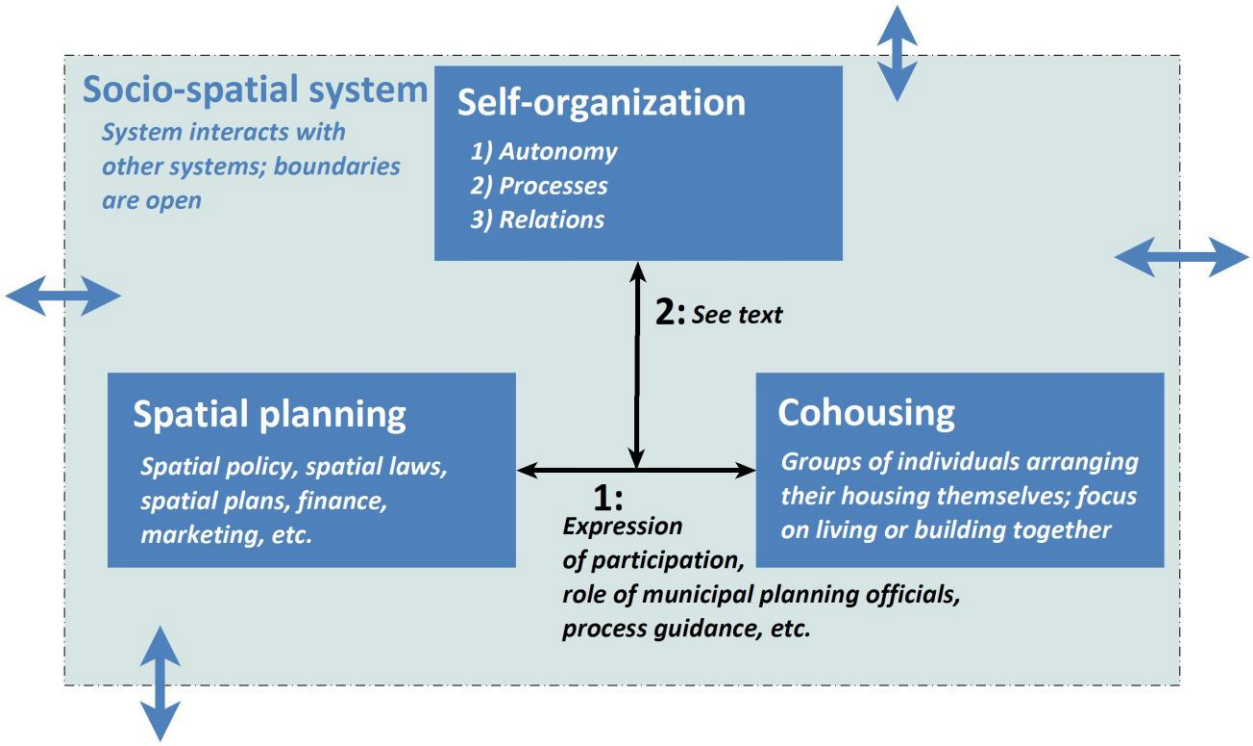

Figure 5 – The extended conceptual model

officials in cohousing projects. It has to do with for example the influence cohousers have on planning processes, communication between actors in both systems, collaboration between the municipality and cohousing projects, the enforcement of rules and local planning regulations, etc. The concept of participation can be used to say something about this relation. For a given project the position on the ladder of participation could be described looking at this relation (based upon the definition of participation given in this chapter). Later on in this section this topic is further dealt with.

Relation 2: This relation is a schematic representation of the hypothetical explaining force of self-organization regarding cohousing, spatial planning and the relation between these two. Because its main explaining force for planning is thought to work through this relation and the definition of the subsystems it is located at this position in the model. How this works out is further explained in the hypothesis and the analysis of the cases in chapter 5.

The role of the planning official

This research, as expressed, revolves around the role of municipal planning officials in Dutch spatial planning. Relation 1 represents the complex interaction between cohousing and the planning official. It is however also guided by laws and policies which can be located in the box spatial planning. Relation 1 expresses both the formal role and the more communicative and informal aspects of the role of planning officials in cohousing projects. Before we head to the hypothesis it is necessary to distinguish what is understood by the role of the planning official.

The main task of planning officials is to communicate with the citizen regarding all planning aspects as controlled by the government. The planning official is responsible for enforcement of the rules that are put down in spatial planning laws, plans and regulations. This can mean that they have to take care that activities are prohibited and rules are communicated to societal actors with a wish to have an influence on the urban environment, such as actors in a cohousing project. The change of these rules is prohibited to the political part of the municipality. Planning officials can have a role in advising politicians and thus can have influence on the rules via informal routes within the governmental organization. The planning official's role constitutes the execution of the plans that are developed by the municipality and have political consent. The planning official as specialist can also play a role in informing the municipality about the possibilities and constrains coming from the existing urban environment. This is relevant in case a municipality is initiator in a cohousing project. The role of planning officials with regard to cohousing projects can be divided among three different relations:

1: interaction via (in)formal communication and planning processes (relation 1)
2: construction and enforcement of rules regarding the actions taken in society that affect the physical environment (box spatial planning & relation 1)
3: development of plans and after they have political consent execution thereof (box spatial planning & relation 1)

Hypothesis

From the model the hypothesis can be distilled according to the questions described in chapter 1. Looking at the role of the planner it can be imagined that relation 1 changes according to contextual aspects like the culture in a municipality and the projects at hand. In order to provide an understanding of changes and differences in the role of the policy-maker, it is necessary to compare cases. To do this the comparison has to be operationalized into certain aspects, whereby both the project at hand (content), the involvement of the policy-maker (process) and spatial planning (context) have a role. Based upon the definitions given before the assumption is that both self-organization and participation can be used to compare cohousing projects. However a tool based upon self-organization could be more useful than just looking at the amount of participation because with it the system wherein cohousing is taking place can be taken into account. Regarding self-organization the following hypothesis is formulated:

Hypothesis 1: if self-organization is operationalized based upon cohousing as subsystem of a larger socio-spatial system it can provide a tool to compare cohousing projects.

If it is possible to create such a tool, it is the question what sort of tool this would be. Based upon the ladder of participation and looking at the definition of self-organization given in chapter 2 it is possible to create a scale of self-organization. This points to a degree of self-organization of a cohousing project. Such a scale can be drawn from full autonomy and opportunity to self-organize for the cohousing project towards no autonomy for the citizens and thus total state control. This thinking model can be depicted as is done in figure 5. This leads to the following hypothesis.

Hypothesis 2: if the role of planning in cohousing projects is analysed in relation to self-organization cases can be positioned on a scale between full self-organization and total state control.

Given that this tool can be constructed and cases can be positioned it is necessary to look at its operationalization for both municipalities and societal actors involved (or with a desire to be involved) in cohousing projects. Coupling this to the three characteristics of self-organization -

autonomy, processes and relations- could give vital information for such an operationalization. To be useable the comparison hereby has to give information regarding existing or new projects. It is imaginable that the role of the planning official changes according to the kind of project. Thus if it is known what kind of project is at hand, the role of the planning official can be adjusted accordingly. The other way around it should be possible to say if a project with certain characteristics can succeed in an existing planning context. Thus a third and final hypothesis is formulated.

Hypothesis 3: if the ambition for a cohousing project is known the concept of self-organization can provide concrete tools to (a) look for a matching configuration of spatial planning and (b) adjust spatial policy and the role of the municipal planning professional accordingly.

Based upon the description of the conceptual model a distinction can be made between two uses of the model. The model can be used in general and can be used for specific cases. In general it depicts the relation between spatial planning (§2.4) and cohousing (§1.1) in a socio-spatial system with reference to the concept of self-organization therein. Specific it means that a concrete cohousing project can be placed in the box 'cohousing', spatial planning then being the specific set of rules, regulations and organizations for that concrete cohousing project. This also has influence on the socio-spatial system it can be placed in; the boundaries of the system can be defined (although this is for this thesis not relevant). Self-organization can then be used to shed light on this specific case and can be used to compare it with other cases, based upon the spatial planning system or on the cohousing project.

Figure 6 – Scale of self-organization between total state control and a full self-organized society

This distinction is necessary because the conceptual model, used to relate general notions with each other, needs to be tested regarding its value in real situations. Testing of the model is based upon three specific cases wherefore the notions spatial planning and cohousing and the relation between these are specified. This is done in order to see if the general application of the model is valid.

2.7 Conclusion

The several notions underlying this research were described in this theoretical framework. Self-organization as element of a complex systems perspective is described, together with its

position in spatial planning. The concept of participation was dealt with by describing the ladder of participation. This theoretical framework provided a base for the conceptual model as given in section 2.6. The use and content of the model is explained and out of this three hypothesis are distilled. These hypothesis describe the relations in the model. To test the model, and thus the relations, three cases are used. How data is collected for these cases and further justification of a case study approach is subject of the next chapter. In chapter 4 the cases are described, together with the more general spatial planning context. In chapter 5 both this chapter as well as the following empirical chapters are drawn together into a discussion wherein the hypothesis are tested against the cases so lessons and recommendations can be distilled. These lessons and recommendations are subject of chapter 6.

3 Research design

To test the hypothesis empirical data is necessary. This data has to be applicable to both the hypothesis as well as to the research questions. Hereby the conceptual model plays a vital role since the notions described therein give information about what is necessary to distil out of the cases. In this chapter the research design is elaborated upon by describing the required data, the methodological approach and a further specification of this in three subsequent sections. The chapter closes of with some ethical issues and a short conclusion.

3.1 Required data

To test the hypothesis and thus to answer the formulated research questions data is required. The choice for the research methods can be based upon the type of data that is necessary to be collected. To test the hypothesis an extensive outline of more than 1 case has to be given since a comparison is implied in hypothesis 1 and 2. Necessary data can be distilled out of the conceptual model: (1) spatial planning, (2) the cohousing project itself and (3) the relation between the two. Data consist of:

1) Existing rules and policy, financial budget for governance of cohousing, marketing, etc.
2) Motivation and goals for the project, the process a case already went through, technical details if relevant for a case, physical appearance, etc.
3) The freedom for the cohousing project to decide relevant aspects themselves, aspects related to the choice for a location, the effort of planning officials in enforcement of rules, the amount of communication between a project and planning officials, project specific aspects concerning the relation with spatial planning.

Per case the information and description will be different, the kind of data however is the same for all projects: it is formal data concerning rules and policy or informal data concerning process and communication. Next to the data necessary to test the cases, data is collected to create the theoretical framework in chapter 2. This data can also be found in different sources. The kind of data already hints on the methods necessary to collect the data and the way to analyse it in order to test the hypothesis and distil the answers on the questions as formulated in chapter 1.

A lot of the data can be found in literature, with subsequent data from policies and websites. This counts for the descriptive part of the research. The more explanatory part of the research where the hypothesis are tested depends mostly on information only accessible via persons. This leads to a distinction in primary and secondary data. The secondary data is used in the

descriptive part to provide an overview of the relevant themes and was used to describe several notions essential in this research. It also is used to embed primary data into existing results and thus in a larger framework. Lastly it is used to funnel the questions so the scope for the questions becomes outlined. Primary data can be collected based upon policy or via information of persons. All primary data in this thesis is qualitative data.

3.2 Methodological approach

To get data this must be valid data and of course appropriate for the answer looked for. To get the data, a methodological approach is used to make this research a systematic inquiry into the topic of cohousing. This takes as much as possible into account the internal and external validity of the research (Gaber, 1993). To enlarge the internal validity methodological triangulation is applied if possible, so the results in the research can be compared and combined so reproduction would lead to the same results. This thus leads to a mixed methods approach, combing the strengths of field work and desk research together with primary and secondary data (Gaber, 1993). The external validity is partly covered by methodological triangulation, the rest is as much as possible covered by remaining as close to the results as possible, without trying to generalize too much.

With this in mind, the best approach is a case study approach, to conduct interviews combined with a broader policy analysis and one or two interviews outside the cases to check for the internal validity. For the literature a desk research is conducted. This means that different research techniques are used, whereby the main focus is on the desk-research and interviews within the case study and the possibility of a policy analysis and interviews outside of the case study which can function as a check and to enlarge the generalizability of the results. These different methods and the case study approach can provide in-depth information of the topic at hand, also related to the type of data necessary. The case studies can also function to test the hypothesis and the conceptual model. The application of the several techniques is dealt with in the next few sections.

3.3 Case study research

The main emphasis in this research is on three cases wherein policy analysis is done and interviews are conducted. A good case study is on the one hand ideal to go in-depth into the study object, on the other is has some limitations for the generalizability (Petty *et al.*, 2012). The policy analysis, desk research and interviews outside the cases can provide a more holistic vision so induction remains possible. The cases are used to look into the changes in spatial planning due to the single fact of cohousing. It is thus progress or change oriented and from a

critical theory point of view used to not only describe but also to recommend how to go forward. Therefore not only a policy-maker involved in de governmental side is interviewed, but also a participant (experts or initiators) in the cohousing projects is asked how he sees the role of policy-makers as was visible for him in the process. This involves thus also a more evaluative point of view.

Criteria for cases are developed based upon desk research. The four criteria for selecting the cases are:

- Netherlands based

As already mentioned in the introduction this research is Netherlands based because the emphasis on building processes within cohousing comes explicitly to the fore in the case of CPC. Because CPC is already some time practiced it can provide insight into change in policy and in the role planners have. It also needs to be Netherlands based to stay within the spatial planning context, a systematic comparison of different spatial planning systems is beyond the aim of this research.

- Already a few years underway

The cases need to be a few years underway because then it is possible to find changes that have occurred and the exact reasons for it. Just started cases could only show anticipated changes in policy.

- Clear link with the municipality

In some way or another the cases have to have a link with municipalities. Or in trying to stay away from all governmental control or in stimulation by the municipality. This in order to distil effects on planning policy and practice of municipalities. Because a lot of different municipalities are currently dealing with some form of cohousing, the main emphasis is on finding municipalities where policy-makers already have to deal with cohousing some time or where the municipality has sought actively for a way to deal with cohousing.

- Explanatory power seen from self-organization, participation and planning

Cases have to have in some way explanatory power for both spatial planning and for self-organization and participation. This in order to create coherent findings that are applicable to the stated questions. The cases thus also have to be different to create a larger explanatory power than when they are all the same. Next to this at least one case is based in a more rural situation, creating the possibility to compare a urban situation with more rural based cohousing.

3.4 Desk research

Policy-documents and laws are often available via internet, as are peer reviewed articles and subject matter of books (which subsequently could be looked up in a library). Desk research is

therefore the ideal method to find this kind of data. Operationalization will take place via definitions of the subject-matter, looking for keywords via Scopus (in the case of peer reviewed material) and Google. The same counts for all other digital available information like newspaper articles (LexisNexis) and websites related to the cases (Google).

Looking for relevant articles and structuring these is a vital component in systematic desk research (Flowerdew&Martin, 2005; Okoli&Schrabram, 2010). In looking and reading a log is kept, wherein the searches have to be posted. In an excel sheet searches are structured and metadata is summarized. In this case the most important metadata are the date of the search, keywords used, the amount of hits, relevant articles, the scope (so only looked in titles, or also in summaries, etc.) and the amount of new articles. The relevant articles per hit are structured in the same excel document wherein author, date, title are stated. Further information shall in this case not be provided due to the amount of time available to research the topic at hand.

Analysis of the data thus gained is done in an iterative way by looking at the arguments given and the theoretical position for the theme at hand. Extraction of the most essential aspects is done based upon a creative process of reading and writing whereby in a sort of hermeneutical approach a constant interaction evolves whereby new readings deliver insight in old writings. This is however not traceable but the thus created text and ideas can be tested by looking back at the used literature. Therefore this kind of analysis and application is chosen whereby its validity from a scientific perspective remains high.

3.5 Interviews

Know-how of representatives or involved individuals regarding cohousing and in general concerning the role of the government in socio-spatial processes has to be collected via other ways than desk research. Due to a short time-frame and lack of manpower within this research the primary way to collect data of this type is via semi-structured interviews on the floor. Focus groups could also be a possibility but due to the mentioned restrictions in time and manpower this is not feasible.

The function of the interviews is primarily to gain information not otherwise collectable. Think about personal experience, power structures, relational aspects, involvement of the government in the projects, process related aspects, case specific information, insight in complexities and contradictions, etc. (Flowerdew&Martin, 2005). The content for the interviews is developed on basis of the desk research and the policy analysis. The results from the interviews can be used as extra input for the desk research and policy analysis, vice versa the same counts where the literature can influence the questions in the interviews.

The function of the interviews defines also the criteria for interviewees. The main question in this respect is 'who holds the necessary data?'. He who does needs to be selected. The primary way to look for interviewees is handpicking via the cases and via information at municipalities (thus via so-called gatekeepers). Further snowballing is used to gain access to relevant persons (Flowerdew&Martin, 2005: p. 116-118). The substantive criteria will be developed later on in the thesis itself because, as mentioned earlier, a great deal depends on the desk research. The same counts for the interview techniques because the amount of necessary data and the sensitivity of it could demand other techniques. Semi-structured interviews seem most appropriate, they will be conducted based upon the interview guide (appendix 2).

The amount aimed for is at least two interviews per case, one at the municipality, and one with an involved person in the process of establishing and realising the project. Next to this one or two additional interviews are looked for among other municipalities and experts involved in cohousing in the Netherlands. These last interviews are used to check results from municipalities and the policy analysis (methodological triangulation) but also to get contact with municipalities via snowballing.

Analysis of interviews will be done via transcription of the recordings (or the notes if it is not possible or if there is some difficulty at the interview to record). The text then will be iteratively and in an heuristic way analysed and main points and conclusions regarding the research questions shall be distilled to be used in the thesis.

3.6 Some ethical issues

Important possible ethical issues that could arise during this research are carefulness, confidentiality, openness. Carefulness: due to time carefulness is an ethical point directly under pressure. Confidentiality: due to in-depth interviews and possible sensitive knowledge confidentiality towards interviewees is also an issue especially relevant. In the group communication and openness plays a large role: sharing of data can be seen as ethical just, although not obligatory. Sharing can create an environment open to criticism and new, innovative ideas. This point thus should be encouraged (and for the researcher be a point of attention: do I share?). Other aspects that play a role but are less important for this research are honesty, objectivity and integrity.

To make sure these aspects are not compromised, the first step is to recognise them. The second is to make sure that they remain in sight, by writing them down here. Furthermore the group meetings can make sure that there is an interactive environment to share, but hopefully

also to be critical towards one another. The last method to avoid compromising ethical aspects are regular talks with Ward Rauws and later on Stefan Hartman as supervisors and with people to reflect on the research process.

3.7 Conclusion

With the research above described, it should be possible to gather all necessary data for the aim of this research and to answer the research questions. In the next chapter the Dutch spatial planning context and an extensive outline of the three cases is given.

4 Policy and practice: spatial planning and three Dutch cases

In order to get an idea about the way Dutch local governments deal with CPC two aspects are looked into: (1) cohousing policy at a local level as specification of the general housing and spatial planning policy and (2) the position and role of municipalities regarding CPC. The first is described based upon a policy analysis. The second is described based upon interviews and official municipal statements of several municipalities.

In general this is done for the Dutch spatial planning system. Shortly both the national and the provincial scale is looked into, whereby cohousing policy is embedded in a larger frame of Dutch housing and spatial policy. After this the local level policies are described. First a general perspective on spatial and housing policy applicable for all local governments is taken. Second the specific aspects related to the role of municipalities in CPC are given. This is done in three cases, which are chosen for the example they illustrate: the position and diversity of cohousing with regard to the involvement of the local government. For each of the cases interviews are done (appendix 1&2). To check results and to seek for comprehensive results the interviews not only dealt with the cases but also with the interviewees involvement in other projects. One additional interview is done totally outside the cases (interview F) to check the results and compare the cases with other projects. Relevant policy documents used by the municipality involved in the respective cases are analysed to see how the municipality is involved in planning process and content of the project.

This chapter starts off with a description of the national and general local policy regarding both housing as well as spatial planning. In sections 4.2, 4.3 and 4.4 three cases are extensively outlined, as much as possible in a narrative-like way. Local and general policy and information gained out of the interviews are woven into one story to create the narrative. First the case of Wijngaarden is dealt with. Wijngaarden is a small village in the Province of Zuid-Holland, in the area the Dutch call the green heart: a green, open area between a circle of cities such as Rotterdam, The Hague and Utrecht. In the green heart development is often prohibited or subject to very stringent rules. Second the case of Zwolle is dealt with, this is the capital of the Province of Overijssel, more to the North of the Netherlands. This case is taken because it failed to start building. It provides lessons for other CPC projects, being exemplary for problems that can arise when a municipality tries to develop houses via CPC. The last case is that of Almere, a quick growing city in the polder of the Province of Flevoland which exists since 1975 (Van der Cammen&De Klerk, 2006) and has since been growing to one of the largest cities of the Netherlands. It is still expanding in among others the Homeruskwartier, a new neighbourhood at the west side of Almere where from five initiated CPC projects still two are running.

4.1 Dutch housing policy and the spatial planning context

The history of Dutch housing, with respect to self-organized building and design is quite different from other countries. While self-building and design in countries like Belgium, the USA and France is currently quite normal, a lot of the building in the Netherlands is done via project-developers and housing corporations which develop and build much of the housing stock (Blijie *et al.*, 2009; Boelens&Visser, 2011). This is especially due to World War II wherein the destruction affected more than 25% of the Dutch housing stock damaging it in some way, with almost 100.000 houses demolished (Boelens&Visser, 2011). This led to a huge building effort executed by the post-war Dutch government, pulling all building efforts under governmental control. It left the existing housing corporations intact only as executive of the building effort. This governmental building effort caused the current situation whereby municipalities are the primary land-owner, project developers develop new urban areas and semi-private corporations build and maintain large parts of the housing stock (Needham, 1997). Corporations were deprived from their ideological roots due to privatization of the housing market and only being the executive of building. This led to an alienation of the former members of the corporation and led them to become the semi-public institutions they are nowadays (Boelens&Visser, 2011; Priemus, 1998). In the last decades policy to privatize the corporations and the very complex planning regulations in the Netherlands accompanied with land use restrictions have led to a situation wherein just 10% of the inhabitants builds his house via some sort of private commissioning (Blijie *et al.*, 2009; Boelens&Visser, 2011).

Although housing policy in the Netherlands is part of the spatial planning system, there is a loose coupling between both policy domains, leading to contradictions between the two (Priemus, 1998). On the one hand there is a strong market-oriented housing policy with on the other hand a strong, protective environmental planning system, which limits and contradicts the former. This is due to the already mentioned trend of privatization during the nineties with almost a decade of liberal parliaments while at the same time environmental awareness came to the rise, influencing the spatial planning system (De Roo, 2003; Van der Cammen&De Klerk, 2006). Between 1995 and 2005 the housing policy was mainly promoting building in new neighbourhoods at the periphery of cities, called Vinex-wijken, which were developed to stop car-use and to keep the urban areas within certain limits (Van der Cammen&De Klerk, 2006). Because of the huge building effort (it was a national demand to build nation-wide 645.000 houses) while municipalities only carried 30% of the financial risks, they were conservative in choosing developmental partners (Priemus, 1998). Another aspect of Dutch policy is the so-called ‘compact city policy’, which is also developed to keep the urban areas within certain limits. This policy stimulates a dense urban configuration, thus often conflicting with the

preferences of individuals who want to have green space around their homes instead of dense urban areas (Blijie *et al.*, 2009; Priemus, 1998).

Within the spatial planning system concepts like the compact city are embedded in laws and policy notes. The Dutch spatial planning context however is very complex and can be divided into several levels of governance whereby the responsibilities are divided among a lot of different organizations. It can also be divided among different subthemes like land use policy, housing policy and in this context less relevant kinds of planning like environmental and infrastructure planning. The most important law regarding spatial planning is the Wet Ruimtelijke Ordening (Spatial Planning Act; Wro) (Doorn&Pieterman-Kros, 2008; Needham, 2008) regulating all processes and judicial aspects related to spatial planning. Provincial and local governments are obliged to specify the Wro for their local circumstances. This is done in so-called 'structuurvisies' by the provinces and in so-called 'bestemmingsplannen' by the municipality. These bestemmingsplannen are the most important and judicial binding plans for all Dutch inhabitants and regarding all possible uses of land. All municipalities are obliged to draw a bestemmingsplan for their whole municipality. Next to the Wro, the structuurvisies and bestemmingsplannen there are a lot of other policy documents wherein for example land use strategies, budgetary aspects and the amount of involvement of the public is dealt with.

The ambition to use CPC as instrument to get citizens involved in housing was firstly expressed at national level in the 'Note People, Wishes, Living' (VROM, 2000), leading to political attention and money for CPC. The note thus stimulated provinces and municipalities to take off with PC and CPC projects among others within a set of pilot projects stimulated by the national government and executed by an organization called the SEV (SEV, 2010). These experiments or pilot projects are conducted to see how individuals can build themselves, pushed by recognizing a need for more freedom of choice in the Dutch housing market and the assumption of parliament that CPC would be quicker, cheaper and better for the consumer (SEV, 2010; VROM, 2000). The national government has set the current target of the total build housing stock to be built by PC and CPC at 30%.

A current trend visible in all policy is decentralization, partly based on the concept of subsidiarity. An example hereof is that the National Government has stopped testing municipal plans on conflicting interests since 2012 (MinI&M, 2011). Regarding housing and local land use all responsibilities are (except some parts of the so-called Randstad) carried out by municipalities (MinI&M, 2011: p.11). Regarding CPC the primary government to deal with is thus the municipality (Boelens&Visser, 2011). The strategy of municipalities can however differ a lot within the Netherlands. Some municipalities are more conservative regarding their general spatial planning strategy while others are very progressive in adopting new ways of planning or

dealing with societal actors. Within the obligations of the Wro municipalities are free to govern their specific region in the way they want, therefore housing and spatial policy is currently situation specific and bound to the local circumstances.

This whole context is built upon the notion of CPC within cohousing. In the Dutch context there can be made a distinction between CPC and more living forms of cohousing, in Dutch called central living. For the second type of cohousing no specific spatial policy is developed because it is regarded as just the same as normal housing. CPC as concept is used to describe the building process, done in a collective of people or households. After realisation of houses CPC projects can have a living together component, for example in the fact that people become neighbours or together build a flat. A case thus can be positioned differently over time; the focus can change from building together towards living together. To look in-depth at the Dutch notion of CPC three cases are dealt with in the next three sections.

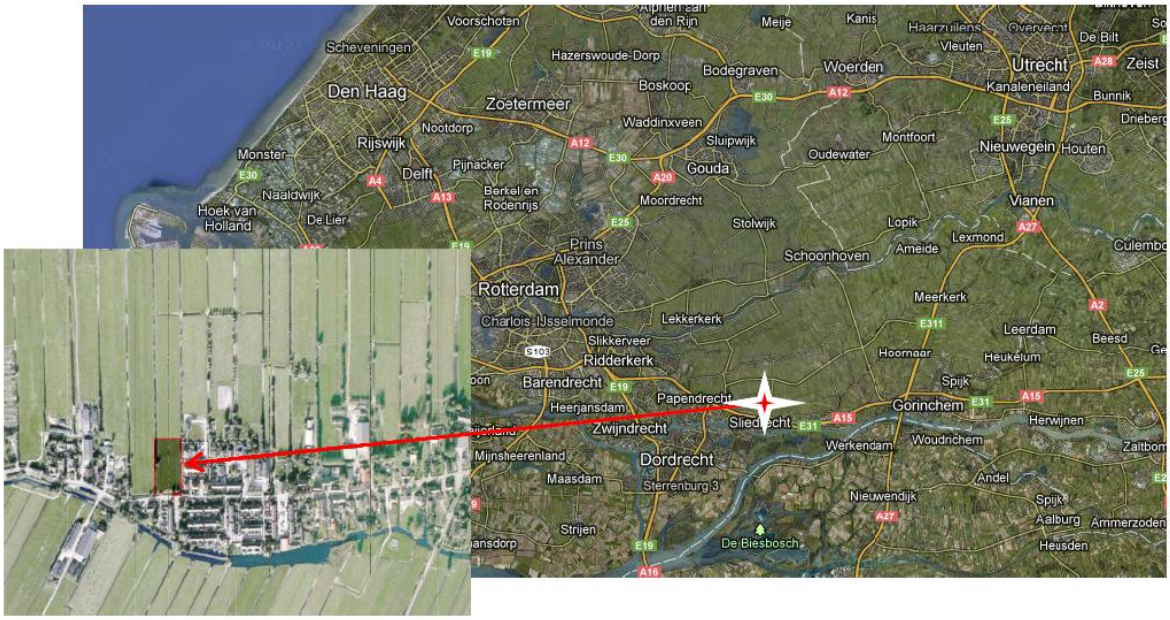

Figure 7 – The location of the village Wijngaarden (with the location of the plot as inset)

4.2 CPC as successful instrument in the village of Wijngaarden

The council of the municipality of Graafstroom, based on an initiative of the Christian Democratic Party (CDA), decided in 2009 they wanted a CPC pilot in their area for its attractive format in these times of crisis (Valen, 2011). Based upon the initiative the board of executives (B&W) drafted a plan with special reference to a plot in Wijngaarden-West (figure 7). This plot became available for the construction of houses due to a large national project regarding gas infrastructure (Interview E, 2012). In this areas the availability of land for building was special

due to the regulations concerning the green heart where so-called expansionist building is hardly possible (see below). The aim, already described by the CDA in their initiative, was to look if it was feasible to do CPC in order to integrate it as standard option in the local housing policy of the municipality (Interview E, 2012; Valen, 2011). Another primary aim was the provision of houses for starters at the housing market. This aim was very important as motivation because of the shrinking population of young people living in the municipality. This population primarily shrinks due to economic migration to the urban centre of Sliedrecht nearby (Graafstroom, 2011; Interview E, 2012) and the lack of housing for young people in the villages which constitute the municipality of Graafstroom (Interview E, 2012). At the end of 2009 the project started with a search of the municipality for participants in the project and future members of the residents association. At the plot there was space for 7 households, which together had to form the association whereby the municipality selected (by drawing of lots) the candidates for the project. The selection criteria for the households were that they had to be starters at the housing market and had to be local (meaning originally from the municipality) (Interview E, 2012). The municipality promoted the project via their website and the local newspaper (Het Kontakt), very quickly attracting 13 interested households (Interview E, 2012; Valen, 2011). Before the project started the municipality put all the rules and regulations studious in two documents. The first document was the 'bestemmingsplan', (Lamkadmi, 2010) based upon the larger policy context and specified for the local area of the plot. It gives already the binding regulations for the building process. The second document was the 'beeldkwaliteitplan' (Aalbers&Sips, 2011) being an additional plan to take care of the integration of the newly planned houses in the local environment.

The primary demands were stated in the bestemmingsplan, additional demands in the beeldkwaliteitplan. This second plan is not judicial binding nor embedded in the law on spatial planning (Wro). It can be developed by the municipality to safeguard the quality of the houses and its environment. It also gives an assessment framework for the physical design. In putting these plans together four basic principles were taken into account (dewaardwerkt.nl, 2012):

1. Protection of the rural character of the location
2. Protection of the pattern of trenches in the area
3. Create a visual transition between the village-like architecture and the polder
4. Connect to the existing pattern of pavements and roads in the vicinity of the project

These principles are based upon the structure vision for the whole municipality wherein protection and preservation of the landscape values is central (Graafstroom, 2011; Lamkadmi, 2010). This can be put in a larger frame of national policy to protect the green and open characteristics of the larger area between several cities called the green heart (Lamkadmi, 2010: p.7). The principles led to a whole range of different design aspects for the

Figure 8 – Artist impression of the project in the village Wijngaarden (bongersarchitecten.nl, 2012)

neighbourhood and the houses that were going to be built. This is done onto a very detailed level, for example the kind of trees and hedges in the street and the type of material the façade had to consist of (bricks) (Aalbers&Sips, 2011). Next to this the municipality had a large role in the beginning of the project. They initiated it, prepared the plot for building, created the CPC group and set a lot of rules for the physical appearance of the houses that were going to be build (Aalbers&Sips, 2011; Valen, 2011). They really functioned in the whole initiation phase as the spider in its web, getting subsidies from the province (€70.000 for external advisors and the architect), communicating with the housing corporation (called Tablis Wonen) to see what they could do in the project and facilitating the CPC group in their meetings (Interview A, 2012; Interview E, 2012; Valen, 2011). In the end the selected architect already started with the demands of the municipality and created such a design that was regarded as positive by the residents and the government (see figure 8 for an artist impression of the houses) (Interview E, 2012). Because of the good dialogue with the municipality, the residents association was able to change the plans (bestemmingsplan and beeldkwaliteitplan) for the whole neighbourhood, changing the local road-system was hereby the largest changed aspect (Interview E, 2012).

For this project it turned out to be a very good designed plan, both regarding process and structure: 28th of February 2012 the building started by symbolically hitting the first pole into the ground. One of the remarkable aspects is the political attention and motivation for the project: this really stimulated the success of the project (Interview A, 2012). However, the amount of real CPC is doubtful. The group did contract a builder, an architect and earlier on in the process a project advisor to help in the whole project but the amount of influence on the physical appearance of the houses was rather limited and the architect and external project advisor were paid by the subsidy of the province, arranged by the municipality (Interview A, 2012; Valen, 2011). Hereby the design of the architect (contracted by the residents association) had to be tested by the so-called 'welstandscommissie'. This is a municipal commission installed to overlook the effects of the building plans on the spatial quality (welstand). This however was a formality since the architect used the building plans effectively and integrated them in the design of the houses (Interview E, 2012).

As mentioned earlier there were a lot of rules the association had to move within, although this is not the whole story. Due to the very proactive approach of the municipality and the easy communication the residents were able to change earlier made choices regarding the environment to their benefit. As interviewee A indicated the proactive functioning and the rules set by the municipality were of benefit for the group. The group was namely rather introvert and had benefit of a good structure wherein they could make choices (interview A, 2012). This is a point to take into account, especially if the group is constructed by an outside actor like in this case the municipality: "some groups need more rules and delineation than other groups, it can be hard to start from scratch without any guidance and rules can provide that" (interview A, 2012; translation of the author).

Interesting in this case is the rustic and rural setting. The green heart obstructs a lot of building plans for small communities which are struggling to keep young people within the community and have a large profit by social cohesion (Interview E, 2012). This led to the ambition to use CPC because it gave the municipality a way to create both the houses but also to strengthen the social cohesion between the starters and the village (Interview E, 2012). Due to the village rather closed culture all builders came from the village of Wijngaarden. They also were actively involved in the village's community by organizing a public information evening in the village to inform their fellow citizens (Interview E, 2012). The municipality, also having a benefit by selling the houses and by keeping young people in the village, lowered the ground prices and served as backstop in case a household due to some reason had to quit the project (Interview E, 2012). Looking at the project from this angle CPC became a positive set-up for the municipality, which currently tries to use CPC also in other villages, for example in Nieuw-Lekkerland, a village a little to the north and in the same area (but not yet the same municipality: currently three municipalities are combined into one, thus Nieuw-Lekkerland and Wijngaarden are in the same municipality from January 2013 onwards). The Nieuw-Lekkerland project called 'Tweemaster' is based on the same motivation: financial gain, social cohesion and more freedom of choice for participants (Interview E, 2012). This while the construction in Wijngaarden is almost completed with the municipality, the residents association and advisors satisfied with the whole project (Interview A, 2012; Interview E, 2012).

4.3 How CPC can go wrong: a project in Zwolle

In Zwolle the use of CPC is an ambition of the municipality, expressed in the Living Vision 2005-2020 (ESL, 2005). The reason for CPC is that the municipality has benefit by a higher involvement of citizens with the neighbourhood and their direct living environment (ESL, 2005: p. 12) and thinks this can be realised by CPC. The main ambition of Zwolle is to create space for both individual and collective private commissioning, especially in the districts of Stadshagen

and Westenholte, in the northwest of Zwolle (figure 9). To structure this political ambition a policy memorandum on CPC is developed to give a framework wherein CPC has to take place (KUUB, 2010). In this document the wish of the municipality is stated as to 'actively stimulate and facilitate CPC' (KUUB, 2010: p. 2). With input from KUUB, an advising company involved in CPC, some extra benefits of CPC are given as motivation for CPC in Zwolle. These benefits are: (a) more quality of housing, (b) optimal price/quality balance, (c) mutual profit for participants by sharing knowledge and capacity, and (d) motivation to make investments to create a successful building trajectory (p. 5). The direct role of the municipality as stated by KUUB (2010: p. 7) is:

1. Create possibilities
2. Create a framework
3. Provide a safety net
4. Create moments for assessment of the organization of the collective
5. Take care of a well-informed team within the municipality, especially at the department of building and housing supervision

Figure 9 – The location of the project in Zwolle (with the plot as inset)

This policy memorandum is further operationalized by the municipality into several other documents which form together with some site specific information the 'information packet' concerning the Stinspoort project (Interview C, 2012). This project was a pilot project to see if the municipality could use CPC to develop some land owned by the municipality in the district of Westenholte (see inset figure 9). In the project the municipality actively tried to put the area on the market via an extensive marketing effort. This has been done via for example flyers in the surrounding neighbourhood, an information stand in the city centre of Zwolle, publication of the project on the website and the earlier mentioned information packet designed for interested citizens (Interview C, 2012). With this project, similar to that in the village of Wijngaarden, the municipality specifically aimed at starters at the housing market. Together with KUUB the whole process was outlined and the project was supposed to start at the 4th of October 2011. With too much interested households the residents association, that had to be installed as one of the demands of the municipality, would be based upon drawing of lot (Zwolle, 2011).

However, the project failed. The main cause was that there were not enough interested households. The municipality divided the plot in 11 parts for the same amount of houses but at the closing of the application period there were just 2 interested households. In the end of 2011 the project has been stopped by the municipality and the area has been sold in the normal way, now being in the hands of a normal project developer who will develop it into low to middle class houses (Interview C, 2012).

The mentioned policy documents are still in force today in the municipality of Zwolle. Although there is not yet a finished CPC project coming out of the municipal ambition, the information regarding this failed project and the policy constructed for it give some valid information for understanding CPC and can also provide learning points. Starting point are the five main activities of the municipality as indicated by KUUB and enacted by Zwolle in the case of Stinspoort. The most important aspect when comparing these theoretical points and the practice in Zwolle is the first point: it seems to matter what kind of opportunities are created. Not so much in terms of building guidelines but in the surrounding neighbourhood, the local physical environment and the position of the municipality. Since all over the Netherlands projects with starters did work, for example that of Wijngaarden but also in Emmeloord (Interview F, 2012), Breda (Interview A, 2012) and other places that can't be the sole reason for the projects failure. For example the mentioned nearby trailer park could be an additional reason. What also is a probability, as was indicated by the interviewee of the municipality (Interview C, 2012) is the difference in culture in the city of Zwolle. The abundance of successful private commissioning in the surrounding area of Stadshagen was not regarded as an explaining

aspect for the failure of the project by the municipality of Zwolle, although in Almere it is concurring with CPC, as will be described in detail in the next section.

4.4 The fight between PC and CPC: the case of Almere

The third and last case used in this thesis is that of Almere. This city has still a huge building effort to undertake in the coming years, although the financial crisis has some effect on the total effort (Interview B, 2012). The municipality deals with its building effort in a different way than in the rest of the Netherlands: a lot of the 60.000 houses that have to be built in the coming 20 years can be realised via PC whereby also space is available for CPC (Almere, 2009). In this case the focus is put on the neighbourhood of Homeruskwartier, which is located in the area of Almere Poort, in the west of Almere and near the IJssellake (figure 10). In the coming years this area is going to be developed whereby 12.000 houses need to be built, together with all its subsequent facilities like schools, roads, parks and shopping malls (Almere, 2009). In Almere one of the primary motivations for giving room to a large amount of PC and CPC is due to a member of the board of the municipality and former member of Dutch parliament Adri Duivesteijn. New, demand driven kinds of building are implemented in Almere, based upon the idea that people want to have a say about how they live their life and thus about how their houses are constructed (Almere, 2009; Almere, 2010; Interview B, 2012). From this ideal Almere Poort is going to be constructed with a variety of (C)PC and also shared commissioning (wherein residents and project developers cooperate in the building process). The aim of the municipality is to create diverse and vibrant neighbourhoods wherein residents are involved

Figure 10 – Almere with the neighbourhood of Homeruskwartier as inset

and committed to their neighbours and living environment (Almere, 2009).

Due to the aim and capacity of the municipality of Almere there is a lot of experience with PC and other building forms. The municipality has invested a lot of capacity in spatial planning and process management to deal with process, content and form of the building effort. This subsequently led to an investment in a marketing program called 'I build my house in Almere', which is further specified into several building forms like 'I build a house', 'I build two or three in a row' and 'I build a living-working villa' (Almere, 2009). Because the whole neighbourhood of Homeruskwartier is planned from scratch, on municipal owned ground and in an empty and flat landscape, planners could structure it according to the wishes of the municipality. The diversity of PC thus could be used to its fullest extent (Almere, 2010; Interview B, 2012). Next to this the high building effort led to a more structured approach towards the citizens and potential inhabitants by setting up a so-called 'kavelwinkel', literally translated as 'plotshop' (Interview B, 2012). This was also integrated in the marketing approach. This shop is located in the town hall and is permanently open for everybody interested in building in Almere.

This whole set-up has also implications for CPC. Within the marketing approach CPC is translated into the slogan 'I build together', whereby Almere looked at the practice in Tübingen, Germany, where 'baugruppe' (building associations) are a normal phenomenon (Interview B, 2012). Because the municipality had bad associations with the notion of CPC they translated this into bouwgroepen (Interview B, 2012), which is the current term for CPC in Almere (Almere, 2010). Currently there are however not much CPC projects or bouwgroepen in Almere, only two are running, whereof one almost ready to start building, with one problem to tackle: finance (Interview B, 2012; Interview D, 2012). As indicated by a civil servant of the municipality there were around five initiatives that started up in the last years. The main reason indicated for this small amount and the failure of at least three initiatives the civil servant indicated as a competition with PC. Hereby PC is winning due to the same costs as CPC (so there are no real benefits of scale) and the amount of freedom that is higher in PC compared with CPC (Interview B, 2012). This last point being the main reason why projects collapsed: CPC can be a struggle to get wishes of the group integrated in one concept, while in PC all wishes of the individual household can be delivered.

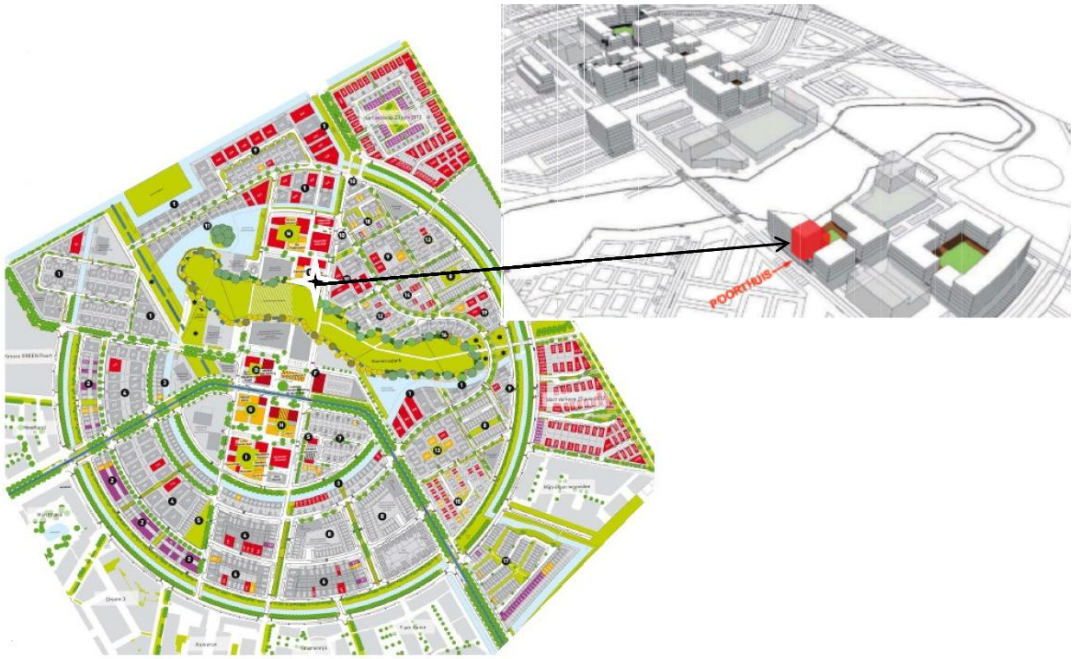

Figure 11 – The neighbourhood of Homeruskwartier with 'Het Poorthuis' as inset (Almere, 2011, Artist impression Het Poorthuis, 2012)

Zooming in on Homeruskwartier there is one almost finished project, which had some local media attention due to the integration of a social aim in the project (Het Poorthuis, 2011) (figure 11). The project started off as an initiative by two families who had the ambition to serve the neighbourhood, motivated by their Christian evangelic faith (Interview D, 2012). To realise their ambition the idea came up to build together with some families a shared facility wherein apartments for the households would be created, some communal space would be located and space to take care of troublesome teenagers and people in need. Really starting from the bottom up the initiators attracted more households after a first initiative in 2007 had stranded (Interview D, 2012). As a group they went to the municipality to get information about the Homeruskwartier and started the process of developing a plan for a shared building for 5 households (all families with children) (figure 12), a communal room with direct access to the street, a kitchen for groups and a second space for communal activities (see figure 13 for the a 3d rendering of the final design). The plot is in the centre of Homeruskwartier, north of the park and

Figure 12 – Building group Het Poorthuis (Interviewee D, 2012)

between the shopping facilities in the neighbourhood, so the communal place is easily findable and accessible for citizens of the Homeruskwartier (figure 11). The location for this project was chosen in collaboration with the municipality (Interview D, 2012). For the location however several rules or demands are in place, just as it is the case for all plots in the neighbourhood of Homeruskwartier (Almere, 2009). For this specific location in the centre and with so-called piled houses, rules concern among others height, the façade and the plight to buy parking lots. This last aspect has been an aspect of debate because the additional space for helping others also required parking lots (three small one person apartments are realized, but every apartment needed a lot) while these are not necessary because people in desperate need of a sleeping place (wherefore the apartments are constructed) normally don't own a car (Interview D, 2012). The discussion led to a lighter rule for this specific case but still more parking lots have to be bought than necessary in the opinion of the association (Interview D, 2012). There is thus a lot of freedom regarding the location, physical appearance and function of the building but the municipal rules that are in place are very stringent put onto (C)PC projects.

In the context of Almere's building effort and the large investment of the municipality in PC and CPC it is clear that there are rules given by the municipality. Although these do not limit the freedom necessarily, they are mostly aimed at creating a coherent image of a street or neighbourhood or are used to safeguard projects for financial disasters (an overall prepayment

Figure 13 – A 3D rendering of the final design, front view (left) and back view (Artist impression Het Poorthuis, 2012)

of 10% of the price for a specific plot (Almere, n.d.)) (Almere, 2009). For a coherent image demands of the municipality involve the several types of PC projects (building in a row, a house, a work and living place, etc.) which each have their own specific location. For CPC projects there is the extra demand to establish an association of residents (Almere, 2009). However, within the project a problem is still in the way: finance. The interviewee (D), who was one of the initiators of the project, pointed to the role banks play in such projects. Lending mortgages has become a lot harder since the financial crisis. Due to the extra facilities that have to be realised even the amount of more than €150.000 of received money (50% as a gift, 50% as loan without rent) for the project is not enough. Banks are not willing to jump in to lend enough money due to the risks involved (Interview D, 2012). Currently this means that because the official building permit has a limited validity, a new request could be obligated. Leading to the situation that although the project is almost ready to be executed, the financial struggles push the process on a longer timescale (Interview D, 2012). This is also due to a rule (the limited validity of the permit) of the municipality, stating that after 26 weeks the building has to be started (Almere, n.d.).

Looking at the role of the municipality especially the uniform way in approaching the building effort that has to be made is a remarkable aspect. Primarily the plotshop as information centre is a great way for the citizens to be approached by, and approach the municipality concerning building related questions (Interview B, 2012; Interview D, 2012; Interview F). However, the rules put on the CPC project could be less stringent and more flexible, especially when looking at the function of the apartments that are going to be built the amount of parking lots is a rule which could be adjusted per situation. Overall it is remarkable how the whole organization of the municipality of Almere is adjusted to create space for (C)PC, which already is copied to some extent to other municipalities, for example Meppel (Interview F, 2012). Due to the effort of Adri Duivesteijn the whole organization of the municipality changed. Mainly the shift in dealing with a few project developers towards a large group of individual citizens demanded a changed focus and a more communicative, participatory style of approaching citizens (Interview B, 2012). Next to this the more free, inhabitant-based way of building also asked for new approaches, whereof the plotshop, the small amount of rules and the communicative style of the government are the most important aspects (Interview B, 2012). How this can be placed in the context of smaller municipalities, with a larger building effort or, like in Wijngaarden, with higher involvement of rules and regulations decided upon on higher governmental levels, is subject of the next chapter. Therein the cases are compared but also placed in the theory as dealt with in chapter 2.

5 Analysing the cases

At the beginning of this thesis we set out to answer the following question: 'How can the concept of self-organization enhance the role of municipal planning officials and instruments in Dutch cohousing projects?'. To answer this question participation and self-organization were discussed in chapter 2 because there is a debate to which the extent these can be used to describe spatial phenomena. In chapter 2 and also in chapter 4 spatial planning is discussed whereby the focus is placed on the larger frame wherein the role of municipalities and the municipal planning official is embedded. In chapter 4 three cases are extensively described, based on interviews, local policy and other documents. Hereby aspects essential to analyse the cases with the conceptual model are described in order to answer the main question.

This chapter sets out to take the last step necessary to answer the research questions. This is done by drawing the different aspects or 'lines' in the thesis together in a synthesis. This synthesis revolves around the conceptual framework as formulated in chapter 2. The aim is to embed the cases in the theoretical framework as described in chapter 2 and place them in the conceptual model. This is done to test the hypothesis so a comprehensive conclusion becomes possible regarding (a) the conceptual model, (b) the hypothesis and (c) the main research question.

First we look into the role of municipal planning officials in cohousing. Then self-organization is used to explain the role of spatial planning. Herein the discussion concerning the position of participation with respect to self-organization is dealt with. This chapter closes of with the adaptation planners possibly have to make due to cohousing. In chapter 6 the main conclusions for this thesis, and based upon the analysis in this chapter, are drawn.

5.1 The role of municipal planning officials in cohousing

To look at the effects of cohousing on the role of municipal planning officials the conceptual model can be combined with the description of the cases. First the cases are made specific with regard to the conceptual model. Second the cases are compared to see if there are common changes in the role of municipal planning officials.

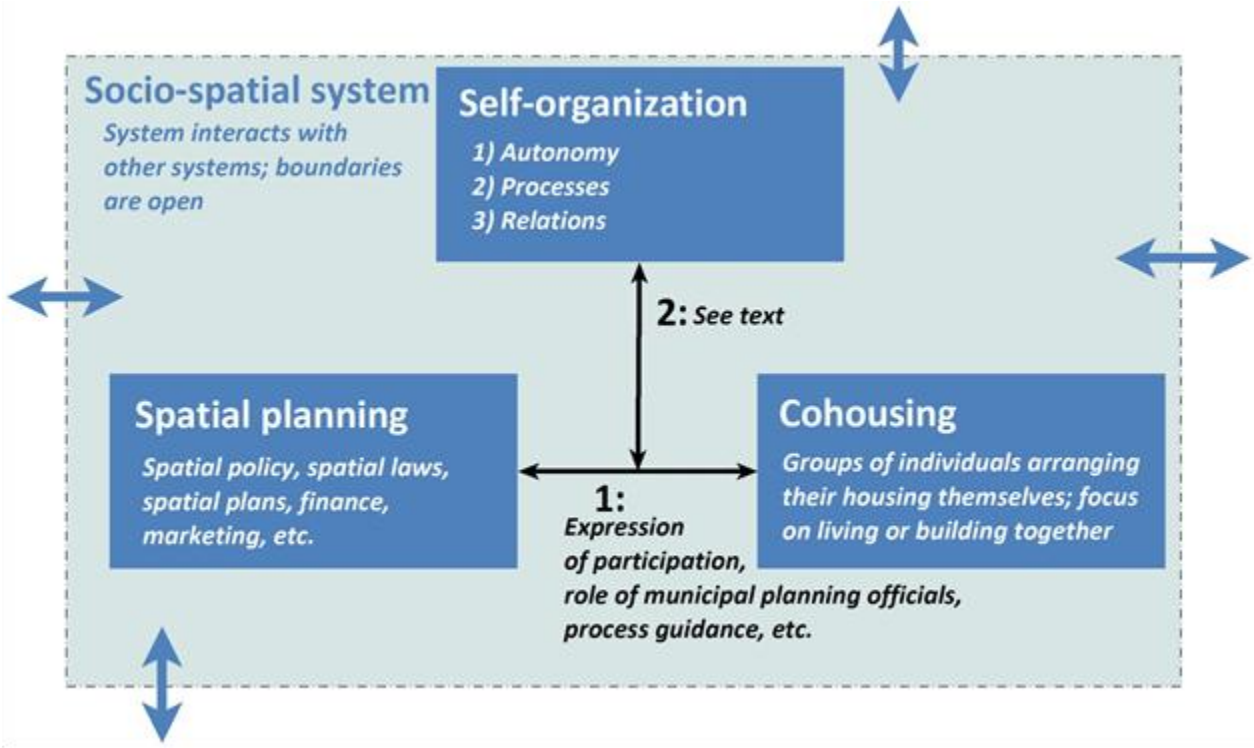

Figure 14 – The conceptual model

To analyse the cases and to test the hypothesis the first step is to analyse the description of the cases based upon the conceptual framework (which is depicted again in figure 14). It specifically deals with the boxes 'spatial planning' and 'cohousing' and the relation between them. For each case the aspects are described in chapter 4, thus it is sufficient to summarize it here. This is done in table 2. The relation between municipal planning officials and cohousing projects is specified for the role of the first for readability of the table. In the text both the role of actors in the cohousing project as well as the municipal planning officials are taken into account.

5.1.1 Comparison of the cases

In this section the cases are compared based upon the narrative in chapter 4 and the summary in table 2.

Box cohousing

As is visible in the summary the cohousing projects are rather similar in Zwolle and Wijngaarden. Almere is different in that respect that (1) the municipality is not the initiator and (2) the large amount of freedom to pick a plot. The fact that the municipality is initiator in Graafstroom and Zwolle becomes apparent in the demand regarding group structure: starters at the housing market. If the citizens would initiate a project this would be an odd demand since a group already formed itself. In Zwolle and Graafstroom one plot was available, meaning that citizens had to accept the location made available by the municipality, thus limiting the

possibility to have cohousing even take place. Both process related aspects (kind of cohousing project, initiators) as well as content related aspects (amount of plots) play a role in defining the relation. The context doesn't play a large role in this definition. A large exception was the availability of plots. In Wijngaarden it was special that a piece of land came into the hands of the municipality while in contrast Almere has large areas of land. The context –location- was in this respect decisive: Wijngaarden located in the green heart area, Almere in an empty polder of just a few decades old.

Table 2 – Overview of the case specific aspects in the conceptual model

	Graafstroom	Zwolle	Almere
Box cohousing	CPC | 1 plot | 7 households | initiated by municipality	CPC | 1 plot | initiated by municipality	CPC | a lot of plots | initiated by citizens
Box spatial planning	Finance | physical appearance | planning rules | location | advisor | group composition rules |	Finance | physical appearance | planning rules | location | group composition rules |	Planning rules | physical appearance| location | time |
Role of planner	Facilitator | process attendant | merchant | land owner | planner | preparation of land	Facilitator | process attendant | merchant | land owner | planner | preparation of land	Facilitator | land owner | planner | preparation of land

Box spatial planning

Regarding the box spatial planning a lot more can be said. As depicted in the conceptual model this constitutes the rules, regulations and resources at the municipality relevant for the project. It instantly becomes visible that Almere leaves a lot more freedom to the cohousing projects than Zwolle and Graafstroom. In the cases a useful distinction that became visible is that between process related rules (finance, group composition, time, etc.) and content related rules (planning rules, physical appearance, location). The case of Graafstroom is different from the case of Zwolle because a part of the rules are necessary because of the demands of the national government regarding the Green Heart, the municipal autonomy being curtailed by contextual aspects (Interview E, 2012). This counts especially for the location, planning rules and physical appearance of the construction. To let the project succeed the municipality also demanded an external advisor to guide the process, thereby also paying for him (Interview A, 2012). Comparing the physical rules, Graafstroom is the most specific, an example is a rule regarding the kind of building material. Almere is the most free, only limiting in height, the façade and parking lots (but we will come back to this with regard to the relation between spatial planning and cohousing). Regarding the process a remarkable aspect is the time

dependence of Almere: within 26 weeks the building has to start or else a new permit has to be arranged. This was not the case in the other two projects, were no time demands were in place.

Relation between spatial planning and cohousing

Comparing the cases based upon the relation between spatial planning and cohousing projects shows that this was the same in the cases of Wijngaarden and Zwolle, while the municipality of Almere has a much smaller role. Facilitator, as stated in table 2, means that the municipality is available for help, advise and financial aspects. Process attendant means that also in looking for a constructor, architects and advisors the municipality plays a role, as well as in creating the group and arranging the residents association. The merchant function of the municipality is directly combined with being initiator. The municipality thus got the responsibility to find participants and to sell the project. Zwolle build a whole marketing plan and even visited the local market, becoming really a merchant with a market stall (Interview C, 2012). The efforts of the municipality of Zwolle thus obviously went farthest in creating a group to sell its project. In this role the other way around was also interesting. This however is only possible to say for Wijngaarden and Almere since there a cohousing group exists. In both projects the citizens were very active. They had to discuss a lot of aspects with the municipality. In Wijngaarden this actively was stimulated and facilitated whereby there was real interaction, for example in adjusting the rules that were applicable. The citizens got a say in the spatial planning system of the municipality. In Almere the role of the cohousing group was also actively facilitated, mainly based upon the effort of the plot-shop. The project also was able to adjust the rules but to a much lesser extent than in Wijngaarden. There the planning rules were really flexible, the group had even influence on the lay-out of the surrounding area while this officially already was decided upon (Interview E, 2012).

5.1.2 Change in policy and the role of municipal planning officials

In this section the indicated aspects in the section above are used to describe the change visible in spatial planning compared to the old situation in the municipality and normal housing projects as defined in chapter 1. This change can occur due to all three aspects but takes place in the box spatial planning and the role of the municipal planning officials.

Box cohousing

Looking at change with based upon the aspects in the box cohousing there is mainly in Almere a shift visible. It is normal for municipalities to take initiative in housing projects if they own the ground. The municipality of Almere however changed this by doing nothing with the plot and instead waited for a (group of) citizens to take the initiative to develop the land. This is a change in the local approach from actively selling plots to project developers to initiatives out

of society. Hereby a large effect is the amount of initiatives wherewith the municipality of Almere has to deal (Interview B, 2012).

Municipal organization

For a municipality to take the initiative is a large effect of the aim to get a CPC project, pushing the municipality in all three cases to invest time and financial capacity in their own organization, for Zwolle and Graafstroom by constructing project teams to deal with CPC (Interview C, 2012; Interview E, 2012) and for Almere by changing the whole set-up of the spatial and housing sections of the municipal organization (Interview A, 2012).

Planning rules

Change in the role of the municipality with regard to the planning rules are primarily the amount of rules. In all three cases there is a lower amount of rules, mainly regarding physical appearance, in comparison with the regular practice (Interview B, 2012; Interview C, 2012; Interview E, 2012). New rules are constructed regarding the process of the project, whereby for example finance is sought to stimulate the projects (Interview B, 2012; Interview C, 2012; Interview E, 2012) and the demands regarding group composition, which are not applicable for regular projects.

Process and role of the municipality

In all municipalities a change occurred with respect to the normal process and role of the municipality. Almere turned the whole process around by instead of selling land to a project developer with specific rules and predefined planning lay-out they now sit back and wait for the individual citizens and groups to come buy land to build their house. They thus really shifted from a municipality with control over all aspects to a facilitator, leaving as much freedom as possible for the citizens (Interview B, 2012). Zwolle tried to really sell the project and thus had to be much more active in marketing and communication of the plan then they would normally have to be when just selling the plot to a project developer (Interview C, 2012). The turn at the municipality of Graafstroom is less clear but the municipality also had to communicate much more due to the high involvement of the residents (Interview E, 2012). This change thus has a common denominator: from selling the land to a project developer under strict conditions and high control of the municipality concerning the building process towards selling the land to citizens with less predefined rules and higher involvement of the citizens based upon communication and participation. In the new situation Zwolle and Graafstroom became more active than they were while Almere became more passive.

5.1.3 Conclusion

There are thus the following changes in the role of the municipality visible regarding these three specific cases: (1) leaving the initiative to the citizen, (2) less content-specific rules, (3) construction of additional process related rules, (4) more focus on facilitation, and (5) more communication and participation with citizens. It is possible to say that the concept of cohousing induced these changes on spatial planning and the role of municipal planning officials, whereby this at least can be said for the analysed cases. In comparing these findings with additional data gained due to the methodological triangulation it can be said that mainly the changes 2, 3, 4 and 5 are supported by more cases, for example in Breda, Emmeloord and Meppel (Interview A, 2012; Interview F, 2012). Thus it becomes save to say that to some extent the changes regarding more focus on facilitation, communication and participation with citizens and the change in rules towards process related rules can be generalized for CPC.

What is also visible is the interrelation between the several aspects. Due to these kinds of projects in society (induced or not induced by the municipality) spatial planning seems to change. More focus on facilitation, communication and participation with citizens is necessary to have cohousing project succeed. Projects can come to existence due to arising initiatives, but it is in all three cases subject of political ambitions of the municipal council. They wanted to take a more participatory stance regarding the housing needs of citizens. The change in spatial planning is thus subject to two possibilities: a wish in society to have a larger say in housing or a political ambition to have more involvement of citizens (which is the situation in all three cases).

What all this could mean for the role of the planner is described in section 5.3. based upon the concept of self-organization the cases and the relations are looked in. This is subject of the next section.

5.2 Self-organization used to explain cohousing

From the definition of Heylighen (2002) the following three characteristics of self-organization were distilled: (1) process oriented, (2) focus on interaction or relations within a system and (3) (relative) autonomy of the elements (process, relations, autonomy). Analysing the cases, the role of the municipalities and the amount of policy and rules involved in the CPC projects it becomes possible to say something about their relative position regarding participation and self-organization.

Participation seems to have explaining force for cohousing. The amount of participation gives an indication of the freedom cohousing initiators have to influence spatial planning regarding

their wishes. It can indicate how power is divided between 'spatial planning' and 'cohousing'. Projects could be positioned on the ladder of participation where the main task is to operationalize the 8 tiers in the case of cohousing.

Self-organization as concept could also shed light on cohousing. The three characteristics shed light on which aspects of cohousing can be taken into account when using self-organization as analysing concept. The process oriented characteristic takes into account the way a cohousing project comes to existence. The relational characteristic could shed light on how actors in a project interrelate with each other and with actors in the box spatial planning. Autonomy as concept points to the amount of freedom a project has. It thus could give an indication how municipal planning professionals can deal with a project. Self-organization could also be used to analyse the existing policy in order to compare municipalities regarding the best place to initiate a cohousing project. This is substantiated by several authors who use this concept in one way or another with regard to cohousing (Poley, 2007; Sargisson, 2010; Tummers, 2011).

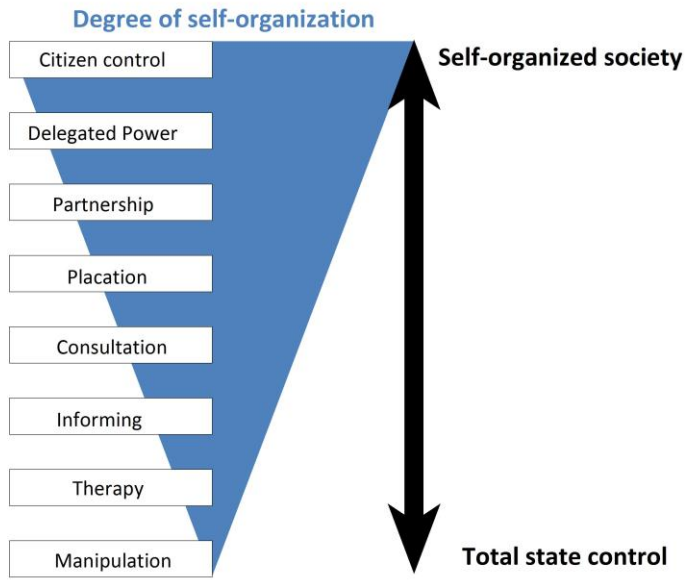

Figure 15 – The scale of self-organization combined with the ladder of participation, the degree of self-organization visualized

The possibility of using self-organization as a tool was already formulated in the hypothesis and shall here be further outlined and explained. Before this the notions participation, self-organization and autonomy need to be positioned relative to one another.

Participation, self-organization and autonomy

To distinguish the differences and similarities between the concepts of participation, self-organization and autonomy the ladder of participation can be compared with the model of a scale of self-organization as depicted in chapter 2. Participation was divided among two usages (political participation versus citizen participation) and defined by Arnstein (1969) as the involvement of the governed in governance. For this case citizen participation is used. Herein participation is a measure for the power of the citizen in planning processes to adjust the planning content. Placing this in the conceptual model citizen participation is an expression of

the relation between the boxes spatial planning and cohousing. The more citizen participation, the higher the power in the box cohousing to adjust the content of box spatial planning.

Self-organization as concept does not include the use of citizen participation. Both can be used to say something about the relation between the boxes spatial planning and cohousing but self-organization does go further than participation. Where participation primarily can be used to identify the relation and prerequisites for this relation. Self-organization can also say something about the content of the box cohousing, the content of the box spatial planning and the influence of contextual aspects from outside the socio-spatial system.

The comparison with citizen participation is based upon the characteristic of autonomy in self-organization. Citizen participation deals with freedom of the citizen to influence spatial planning. In socio-spatial systems the citizen plays a role because they were defined as the elements. Since self-organization thus revolves partly around the autonomy of the citizen. Citizen participation and self-organization can thus be positioned relative to one another based upon the autonomy of the elements. The amount of autonomy can be defined by the power of the elements (citizens) to govern themselves. By using autonomy as the link between self-organization and citizen participation, it can be used to position self-organization relative to the ladder of participation. Full self-organization is in that case located at the top and total state control at the bottom of the ladder. This leads to the scheme in figure 15.

It is important to note that this not implies that self-organization and participation are the same. They are positioned relative to one another without one notion including the other. Citizen participation is a more narrow notion, only saying something about citizens and their power in government, which of course can have consequences for spatial planning. Self-organization as notion has two more characteristics: process oriented and the relational aspects. This means that self-organization, if applicable on a phenomenon in society, has more power of explaining a phenomenon then participation. As already outlined it takes into account the whole (open) socio-spatial system and the two subsystems ‘spatial planning’ and ‘coohousing’. Autonomy is also not the same as participation, although the assumption is that it indicates the position of projects on the ladder of participation since the notions are coupled via the amount of freedom of a citizen as element in a socio-spatial system. This assumption is based on the notion of freedom for citizens to behave independently, thus indicating the amount of autonomy they have, and the ability to participate in spatial planning.

Cohousing and self-organization

Specifying this discussion for cohousing projects it is necessary that cohousing projects can behave like a self-organizing system. Cohousing is a process-formed and time-based structure

(this structure being both the physical appearance as well as the social architecture of individual actors within a project, depending on the focus taken). The second characteristic is that there have to be several elements which need to have relations within a system. For cohousing it revolves around the individual actors involved in the project who together structure the cohousing project and have relations between themselves and other actors involved in the project. Cohousing can also be autonomous although here the involvement of spatial planning plays a decisive role. The question in which degree the elements have control without outside control or stringent rules positions them relative to full self-organization. Thus it is possible to position cohousing cases on the scale of self-organization, which thereby gives a tool to compare cases relative to one another. Operationalization is necessary to position cases on the scale. Also operationalization is necessary to gain relevant information out of such a positioning. Operationalization can be done by for example developing a scoring system. This however goes beyond the scope of this thesis. What is possible is to position the cases relative to each other on the scale and to point to the usefulness of such a scale for municipal planning officials and initiators of cohousing projects. It is also possible to distil relevant aspects out of such a positioning for the changing role of planners. In the next sections the usefulness of the scale is illustrated, in the section thereafter relevant aspects for the changing role of the planner are described.

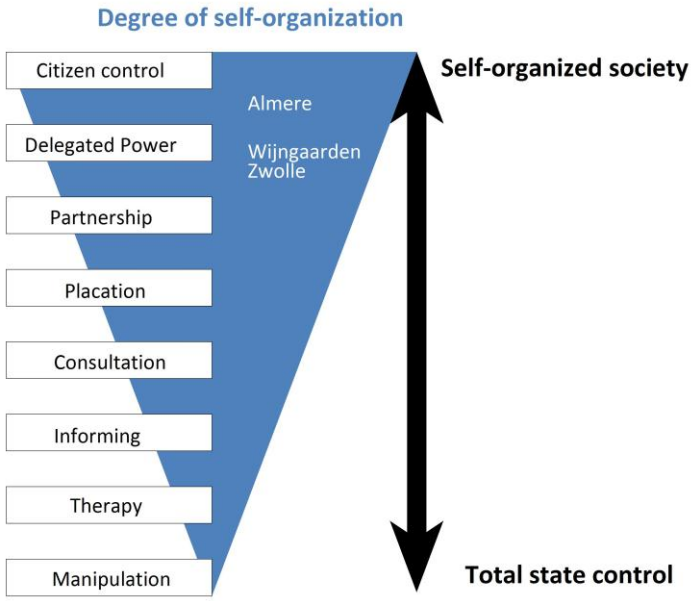

Figure 16 – positioning the cases on a scale of self-organization

5.2.1 The cases on the scale

Looking back at chapter 4 and trying to position the cases from top to bottom on the scale of self-organization gives the following ranking: Almere, Graafstroom, Zwolle (figure 16). In Almere the project initiators have a lot of room to decide both physical as well as process related aspects. The municipality is really organized as facilitator, leaving as much room as possible to the project. It is however not fully self-organized due to the abundance of rules. These are related to the physical structure (content); for example the rules concerning the parking-lots, the façade, and the minimal/maximum height and related to the planning process for example the time rule (see §5.1). The case of Wijngaarden comes second because the

municipality already does a good deal of facilitating but the very pro-active role in finding a group for a specific, predetermined location (context) limits the amount of autonomy for the group. Here also a set of rules is applied to structure the project, thus limiting the autonomy of the group regarding physical appearance, finance and consistence due to the age specific demands of the municipality (content). In the participation between municipality and the project, the citizens were able to have influence on the spatial lay-out, pointing to a more flexible position of the municipality regarding the existing rules. The project of Zwolle, although it failed, can be positioned due to the pre-described role of the municipality. It is third because of the high involvement of the government and the proactive marketing-like style of selling the project (process) and the accompanying predetermined rules concerning the building plot and physical appearance (content). It is however very similar to the project of Wijngaarden regarding rules and the role of the municipality.

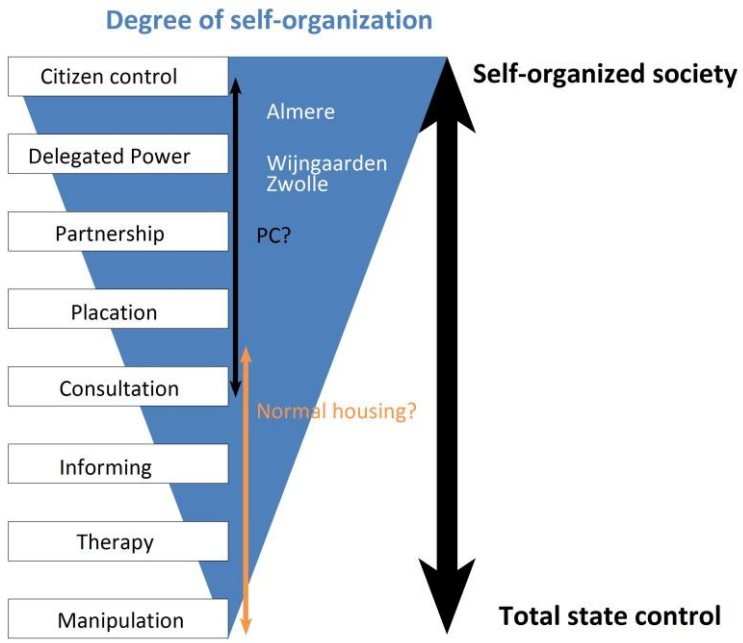

Figure 17 – A suggestion for positioning normal housing and private commissioning (PC) on the scale of self-organization

Comparing this with normal housing projects, were individual or collective buyers and builders don't have a say at forehand and have strict rules concerning rebuilding their house, all three projects are higher on the scale of self-organization. Comparing it with private commissioning is more based upon speculation because this depends on the context-specific situation. For example the autonomy in specific areas can change due to site specific regulations, leading to an large bandwidth wherein these projects can take place. PC can be more self-organized but also less self-organized. Trying to place this also on the scale would give a picture like figure 17. (Hereby substantive critique can be given regarding the other two characteristics of self-organization. These two types of housing are not further used in the rest of this thesis, they are positioned here to illustrate the possibility to compare different types of housing based on the scale.)

5.2.2 The use of a scale of self-organization: an assessment tool

It is possible to analyse cohousing cases on a scale of self-organization whereby none of the cases can be characterised as fully self-organized because of the role the municipality still has in these kinds of projects. Thereby the question of the use of such a scale and positioning is necessary. In this section three usages of the scale are proposed, based upon the third hypothesis as formulated in chapter 3.1.

Usage 1: comparing aim and practice

Looking at the conceptual model and comparing it with both the cases and the theory, one of the fundamental aspects in the current trend in planning is the need for a more diversified and demand-oriented planning approach. Hereby communication and process oriented planning are used to plan the environment with reference to the wishes and needs of the public. Rigid forms of planning and generalized sets of (content specific) rules are pushed to the background. Citizens thus can play a larger role and have more influence on the environment they live in. Expressing the degree of self-organization thus explains the possibility to adjust site specific aspects, in this case the wishes, needs and freedom of the citizen with regards to its housing situation. Since this is the aim of policy for (C)PC in Almere but also in places like Meppel (Interview F, 2012) it can be a tool to assess planning policy in reaching this aim. From self-organization the effects hereof can also be operationalized for other aspects, for example with regard to the spatial planning policy and the role of the municipal planning official. To illustrate this it is done for the role of the municipal planning official in section 5.3.

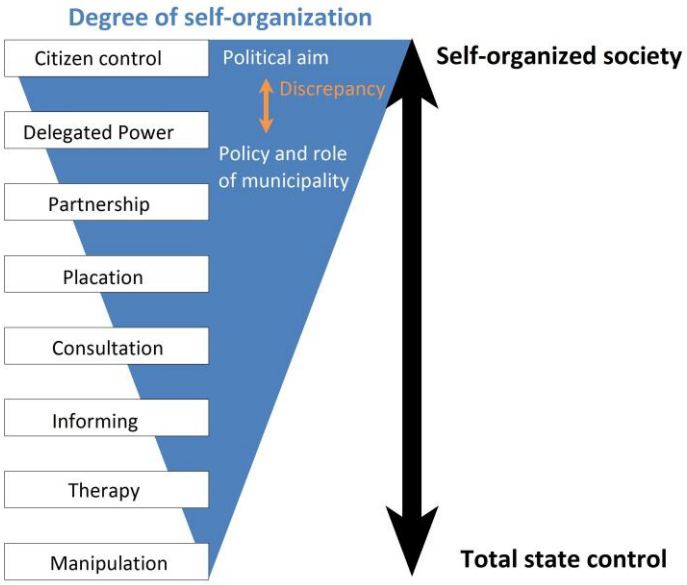

Figure 18 – Political aim compared with policy and role of the municipality in the case of Almere

The scale can also be used to assess the aim or motivation of policy-makers and politicians. Taking the case of Almere, this assessment can be done since the aim and motivation are formulated (Almere, 2009; 2010). Placing these together with the existing policy and role of the municipality on the scale of self-organization, a discrepancy can be seen (figure 18). In Almere an adjustment of one of the two, or both, is necessary. The first thing that can be noticed is the inflexibility of the rules, thus exercising power over the wishes and freedom of the project. If the policy in Almere is assessed based upon the aim (Almere,

2009; 2010) then the policy needs to be adjusted. An example of such an adjustment is that in communication with the citizens it should become possible to be more flexible with rules. If assessed the other way around an insightful comment by two interviewees is made: 'sometimes more guidance by rules or communication can be necessary' (Interview A, 2012; Interview D, 2012). Thus the aim could be adjusted accordingly to the existing situation.

Analysing the case of Wijngaarden, the motivation primarily was to create houses for starters with a financial gain and social cohesion in the neighbourhood (Valen, 2011). The aim was not to create a totally self-organizing housing initiative, with much freedom for the residents, but a more participatory building process wherein the community engaged in constructing houses in a heavily protected area. Placing in this case both the aim, the policy and the role of the municipality along the line of self-organization they match a lot better than in the case of Almere. The project can be regarded as a success compared to the aim wherewith the municipality set out to conduct it.

Usage 2: assessing municipal practice for initiators of projects

Out of the literature it became visible that cohousing projects can be divided on their focus on building and on living (see chapter 2). Out of the cases a second distinction for the Netherlands is visible: there can be made a distinction between government-stimulated cohousing (Wijngaarden, Zwolle) and privately induced cohousing (Almere). This distinction becomes not only visible comparing the three cases, it is also visible in for example Williams (2005) who talks about governmental stimulation programmes and pilot projects induced and guided by the government. This distinction can be useful for the assessment tool because as illustrated above it mainly revolves around municipalities. For municipalities policy can be positioned against the aim and motivation. Thus it becomes a tool regarding municipalities constructing or redefining their policy for CPC. For privately induced cohousing it can also be used to assess policy in order to compare municipalities upon the possibility to create a CPC project, this being the second usage that can be identified for the assessment tool. The choice for a location (with its specific spatial planning system) to start a project thereby of course depends on the wishes of the project group and the ability to move. Comparing for example the municipality of Zwolle and Almere it becomes directly clear that if a group wants to have a lot to say concerning their project Almere is much better than Zwolle concerning autonomy regarding both location and physical structure of the buildings. On the other hand, if a cohousing groups wants more guidance and if the location within the municipality doesn't really matter than Zwolle could be the better choice for such a group.

Usage 3: constructing policy

Municipal planning officials confronted with a wish for cohousing in a municipality where not much is yet done can use the tool to look for similar municipalities. The wish for cohousing can come from society but also from politicians who ask to set-up policy for these kinds of projects. Defining the aim and positioning this along the scale could lead to a frame to seek for existing spatial planning practice at other municipalities. If a lot of freedom is desired, cases high on the scale can be a point of reference to learn from. If more social and financial aims are motive for inducing policy then cases positioned around the case of Graafstroom can be useful to learn from. In this way it can function also as a protection mechanism so only policy that is beneficial based on the aim a municipality can be copied.

To be workable, two aspects are essential but beyond the scope of this thesis. The first is a further operationalization about how to position cases and aims along the line of self-organization. This is possible as pointed out by the three cases, but needs refinement to really compare aim and motive on the one hand and policy and the role of the municipality on the other. Second aspect is that more cases as point of reference have to be investigated, along with a description and specific place at the scale of self-organization. For municipalities and cohousing initiators it can however already provide a basis for seeking the right combination and location for starting a project and learning from already gained experience. A third aspect is the usage of the concept of self-organization to adjust spatial planning and the relation of spatial planning with cohousing projects. This adjustment to cohousing is illustrated based upon the role of the municipal planning official in the next section.

5.3 Beyond theory: a planner's adaptation to cohousing

A project, aim and policy can all be positioned on the scale of self-organization, leading to a tool to compare them with each other. But if looking at cohousing what does it mean for the role the municipal planning official, or in short the planner, has? That is the topic of this section whereby the tool and the cases are used to look at it. This is done based on autonomy, relations and process as characteristics of self-organization.

Autonomy

The amount of autonomy that a project has, or needs to have based upon the aim of the municipality is defining for both other characteristics if analysed for the role of the planner. The amount of autonomy is relevant for the kind and amount of rules that are necessary for a project. The planner has a decisive role in the way enforcement of these rules is conducted. To adapt to the higher autonomy of cohousing projects the planner has to try to communicate about rules instead of just enforcing them. A change in rules is possible but as already

mentioned this is the prerogative of the politician. The planner however can try to influence this based upon the aim and motivation at a municipality. If this is to give a part of the autonomy to the citizen (as was the case in all three projects) then there have to be less rules or the rules have to be more flexible. The planner in that case evolves from an enforcer of rules towards a communicator whereby the flexibility of rules can be used to give citizens more autonomy over their projects. Relations and process however give more concrete indications regarding the role of planners in cohousing projects.

Relations

In self-organization relations play an important, if not decisive, role. For the planner the normal case was the relation between his organization (the municipality) and citizens and actors in society. In government-stimulated cohousing the focus has shifted from the relation between municipality and citizens towards the relations between citizens and the relation between that group and the municipality. The planner thus becomes vital in attracting people via marketing but more importantly for the success of a project, he becomes vital to keep the group complete. In Wijngaarden this was recognised by the municipality. They appointed an external advisor to take care of the relations between the group-members. Also Zwolle recognised this new role for the planner by demanding the construction of an official group which also had to seek an advisor. To adapt really to cohousing planners could take this role themselves because it leads to a better organization of the group and better communication with the municipality.

Before management of a group it is also vital to sell a project. In the case of Zwolle this failed, in Wijngaarden the municipality succeeded. Marketing is a main new function of the planner. This is not only important for government induced cohousing it is also of vital importance in the case in Almere, although the effort there is different: construction of the plot-shop was the main activity. The marketing effort in all municipalities led to announcements via websites and newspapers. The municipality of Zwolle even went to the city market with a stand. It is thinkable that planners have to conduct these kind of activities more often when dealing with cohousing projects. The planners thus had to seek actively contact with the public, something that can be seen as a rather new role because planners often didn't had contact with citizens or if they had this was structured around public hearings or information evenings at the municipality. For Almere a marketing effort could be to create a platform so people can find each other with regard to a specific cohousing project but also regarding the relation with neighbours who are going to build in the same neighbourhood. Relation management can overall become an essential instrument in the tool box of the municipal planning official.

This means that the planner also has to gain new knowledge, for example about how people find each other. The new role also asks from the planner to deal with problems in a group.

Planners have to gain knowledge of group processes and have to learn to interact in such a way that a project comes to a fruitful end. The planner also has to gain knowledge about marketing, about attracting people for a specific goal or he has to collaborate more with the marketing department at the municipality. Regarding the process this also plays a role, together with some process specific aspects that have influence on the role of the planner.

Process

Looking at the role of the planner regarding the process wherein self-organization to a certain extents happens this role primarily can change towards clear communication. The planner has to communicate rules as clear as possible to enhance self-organization of cohousing projects. The content of these rules will change, becoming more flexible, but this means that planning becomes organized around the wishes and needs of specific projects. The planner is not so much a municipal official communicating content specific rules, he becomes a process manager listening to the initiators of a project in order to adjust the spatial planning context as much as possible towards the wishes and needs of the project. This can mean that rules need to be as flexible as possible. It can also lead to a situation wherein the planner has to give a set of rules and has to act as mediator between actors relevant for the project in order to structure the process for the participants in the project. This was clearly visible in the case of Wijngaarden and Almere. In the first case guidance was given, which gave a hold on the process for the participant. The municipal planners together with external advisors had a large role herein (Interview A, 2012). In the case of Almere the project initiators would like to have on the one hand more flexibility regarding content specific rules, but also pointed to a wish to have a little bit more help and guidance in the whole process (Interview D, 2012). The planner could play a decisive role in providing this.

A last aspect that is important is finance. Getting subsidies was a part of the role of the planner, but also rules regarding a first financial investment (Almere) and housing prices for the citizen (Zwolle) played a role. Where this normally was arranged by project developers, since they carried the risks involved in building houses, these risks now have to be covered by the municipalities. The main risk is that during the process a member of a cohousing group can withdraw from the initiatives, leaving a house or plot empty. Almere has a rule that for a plot of land a prepayment has to be made to insure that an initiator is serious about his plans and investment. In Wijngaarden the municipality functioned as back up because the housing corporation didn't want to be involved. The planner thus has a function in finding a solution for the risk. In Wijngaarden and Zwolle this meant that planners sought for active involvement of corporations and banks.

As mentioned earlier municipalities, and mainly the planners, really function as a spider in its web. Communicating, marketing, seeking for participants and actors, creating flexibility in rules, looking for subsidies, etc. All aspects which get a place in the portfolio of the planner if his role is adapted to cohousing.

6 Conclusion

The main question of this research was 'how can the concept of self-organization enhance the role of municipal planning officials and instruments in Dutch cohousing projects?'. In this chapter the conclusion regarding this question is given.

Self-organization is used to create a tool to analyse cohousing policy, the role of municipal planning officials in cohousing and the motivation for Dutch cohousing projects. The tool is also based upon the theoretical notion of citizen participation, which is positioned relative to the notion of self-organization. Self-organization however has more explaining force for the content of spatial planning and the role of the municipal planning official. With the tool it is possible to position existing cases, hypothetical projects, the existing municipal context and the aim and motivation for cohousing. It is also possible to analyse them regarding process, content and context and based upon autonomy, relations and processes as summarizing characteristics of self-organization.

Positioning projects with the constructed tool provides a way to compare these. Initiators who want to find a good municipality regarding the aim of their project can position local policy and the position of the municipality regarding cohousing to see if it matches. Municipal planning officials can compare the political aim and their practice to see if there is a fit or if adjustment is necessary. It is also possible to compare several projects to learn from the situation within other projects.

In this thesis three cohousing projects are compared and, although further operationalization of the tool is necessary, changes in the role of municipal planning officials are identified. Based upon the characteristics of self-organization –autonomy, process, relations- these changes are described. Self-organization of citizens, as is happening in cohousing, changes the role of planners whereby new tasks are for example that they have to deal with group processes, financial risks, marketing and relation management.

Looking at the three cases some further findings regarding the research aim can be described. First the planning rules within the policy change when going up the scale towards more self-organization. It is a change from content based rules towards process based rules. Both kinds of rules exist higher up the scale but the focus changes.

A subsequent 'practical' finding is that in all three cases governments invent the wheel again for guiding, facilitating and structuring the process and content regarding the CPC projects.

Operationalizing the way to position policy and aim on the scale of self-organization could provide a useful tool to overcome this problem and easily compare cases and policy.

Another finding which became apparent in the Almere case is the struggle between private commissioning (PC) and collective private commissioning (CPC). PC allows more freedom and more focus on individual interaction between citizens and public administration then CPC. In the end cohousing might stay due to the public attention and internal motivation of citizens, it demands municipalities to avoid rivalry with PC and facilitate groups without too much rules concerning location and physical appearance. This at least was visible in the cases of Almere where it was easier to build via PC then with a group. The case of 'Het Poorthuis' in Almere is a positive exception due to the internal motivation of the group. More study in this direction could be helpful for successful implementation of cohousing projects.

From the cases of Wijngaarden, Zwolle and Almere it became clear that building houses in the Netherlands is more and more organized in a different way. The role of municipal planning officials herein is decisive, both in process and content and among others regarding spatial lay-out, finance and physical appearance. Self-organization as a concept can give insight in these kind of projects, as illustrated in this thesis. In the end self-organization can provide a tool for policy-makers, planners, politicians and cohousers to compare aim, policy and practice regarding cohousing in the Netherlands.

Looking back at the research question this thesis showed how the role of municipal planning officials and instruments in Dutch cohousing projects is structured nowadays. Based upon self-organization as concept within the larger socio-spatial system suggestions are given to enhance this role. In the end systems theory and more specified self-organization in the urban environment can distil meaning out of processes in society. In this way these concepts can provide vital instruments to enhance the planners role. It can show how the planners role can be adapted to our changing understanding of the urban environment.

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Appendix 1 – List of interviewees

The information distilled out of the interviews is confidential. Therefore the interviewees spoken to in the context of this thesis are therefore made anonymous. For more information the author can be contacted.

Interviewee A (2012) Advisor in CPC projects, also CPC Graafstroom (Rotterdam, 25 June 2012)
Interviewee B (2012) Civil servant Almere (29 June 2012, Almere)
Interviewee C (2012) Civil servant Zwolle (3 July 2012, Zwolle)
Interviewee D (2012) Initiator CPC project Almere (9 July 2012, Almere)
Interviewee E (2012) Civil servant Graafstroom (12 July 2012, Bleskensgraaf)
Interviewee F (2012) Civil servant Meppel (12 July 2012, Meppel)

Appendix 2 – Translation of the interview guide

These questions have served as guideline for the interviews which are conducted for this research. The interviews where semi-structured and differed per case, the already gained information and the organization and position of the interviewee. The interviews where all based upon a threefold construction: warming up phase, sensitive 'deep' phase, cooling down phase (Valentine, 2005).

The interviewees didn't have the questions beforehand except interviewee E on special request.

Warming up phase
Introduction interviewer and research
What is your position within your organization?
What is your daily business?

Sensitive 'deep' phase
1: Vision on CPC
Could you describe CPC in your own words?
How much CPC projects are there in your municipality? (Only municipal officials)
Whereupon lays according to you the focus within CPC?
What is from your perspective the ideal role of the municipality in CPC projects and broader in the housing market?

2: Role of the government
Which role has your municipality (had) in CPC projects?
Can you describe this role? (based upon the content of the role, process related role, financial, amount of involvement, political interest, initiation and marketing, etc.)
Does this role differ from normal housing projects in your municipality? Why (not)? What are differences? (Only municipal officials)
How is CPC dealt with in policy?
Do you see a trend in the role of the municipality if you look back at policy and practice in the last decade? (Only municipal officials)
What was the motivation (and from who) for starting the project(s)?
Is it possible for the municipality to take decisive actions with regard to CPC? Which rules are active for your situation?
Is it necessary for a municipality that it can take such actions?

How was the communication between the municipality and the project(s)?

Cooling down phase

What can science mean for cohousing in general and for municipal planning especially?
What are important lessons from your situation for other projects and municipalities?